 <p>United States Environmental Protection Agency Washington, DC 20460</p> <p>Interagency Agreement/ Amendment</p> <p>Part 1 - General Information</p>		1. EPA IA Identification Number DW-14-92375101-2		2. Funding Location by Region EPA R5					
		3. Other Agency IA ID Number (if known)		4. Awarding Office IASSC East					
		5. Type of Action Augmentation: Increase		6. IA Specialist: Lakeyshia Hairston 202-564-5322 Hairston.Lakeyshia@epa.gov					
7. Name and Address of EPA Organization US Environmental Protection Agency IASSC East 1200 Pennsylvania Avenue, NW, Mail code 3903R Washington, DC 20460			8. Name and Address of Other Agency Department of the Interior FWS / Midwest Region 5600 American Blvd. West, Suite 990 Bloomington, MN 55437-1458						
9. DUNS: 029128894		10. BETC: DISB		11. DUNS: 151157950					
12. BETC: COLL									
13. Project Title and Description Great Lakes Restoration Initiative (GLRI) FY13 - U.S. Fish and Wildlife Service (USFWS)									
Complete the development of the GLRI Action Plan and implement priority programs, projects and activities to protect, restore and maintain the Great Lakes Ecosystem.									
Increase in funding									
14. EPA Project Officer (Name, Address, Telephone Number) Danielle Green 77 West Jackson Blvd. (G-17J) Chicago, IL 60604-3507 312-886-7594 E-Mail: Green.Danielle@epamail.epa.gov FAX: 312-697-2519			15. Other Agency Project Officer (Name, Address, Telephone) Charles Wooley FWS / Midwest Region 5600 American Blvd. West, Suite 990 Bloomington, MN 55437-1458 612-713-5304 E-Mail: charles_wooley@fws.gov FAX: 612-713-5284						
16. Project Period: 01/11/2013 to 01/10/2017			17. Budget Period: 01/11/2013 to 01/10/2017						
18. Scope of Work (See Attachment) Scope of Work remains the same.									
19. Employer/Tax ID No. 520852695		20. CAGE No: 347A4		21. ALC: 68-01-0727					
22. Statutory Authority for Transfer of Funds and Interagency Agreement Consolidated Appropriations Act, 2012, Public Law 112-74					23. Other Agency Type Federal Agency				
24. Revise Reimbursable Funds and Direct Fund Cites (only complete if applicable)									
	Previous Funding		This Action		Amended Total				
Revise Reimbursable (in-house)			0		0				
Direct Fund Cite (contractor)			0		0				
Total					0				
	Previous Amount		Amount This Action		Total Amount				
25. EPA Amount	\$40,549,237		\$100,000		\$40,649,237				
26. EPA In-Kind Amount					\$0				
27. Other Agency Amount			\$0		\$0				
28. Other Agency In-Kind Amount					\$0				
29. Total Project Cost	\$40,549,237		\$100,000		\$40,649,237				
30. Fiscal Information									
Treas. Symbol	DCN	FY	Appropriation	Budget Org	PRC	Object Class	Site/Project	Cost Org	Ob/De-Ob Amt
583/40108	1305HDX037	1314	B	05HN6	202BJ7XF2	2506			100,000
									100,000

Part II - Approved Budget				EPA IAG Identification Number
				DW-14-92375101 - 2
31. Budget Categories	Itemization of All Previous Actions	Itemization of This Action	In-Kind Itemization of This Action	Itemization of Total Project Cost to Date
(a) Personnel	\$5,174,304			\$5,174,304
(b) Fringe Benefits	\$1,816,358			\$1,816,358
(c) Travel	\$1,117,954			\$1,117,954
(d) Equipment	\$2,046,957			\$2,046,957
(e) Supplies	\$0			\$0
(f) Procurement / Assistance	\$28,252,719			\$28,252,719
(g) Construction	\$0			\$0
(h) Other	\$924,468	\$97,000		\$1,021,468
(i) Total Direct Charges	\$39,332,760	\$97,000	\$0	\$39,429,760
(j) Indirect Costs:	\$1,216,477	\$3,000		\$1,219,477
Charged - Amount Rate: % Base: \$ Not Charged: Funds-Out: Not charged by Other Agency Estimate by other Agency Amount: \$				
(k) Total (EPA Share: %) (Other Agency Share: %)	\$40,549,237	\$100,000	\$0	\$40,649,237
32. How was the IDC Base calculated?				
33. Is equipment authorized to be furnished by EPA or leased, purchased, or rented with EPA funds? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Identify all equipment costing \$1,000 or more)				
34. Are any of these funds being used on Procure/Assistance agreements? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
Type of Procure/Assistance Agreement Grant: Cooperative Agreement Contract				
Contractor/Recipient Name (if known)	Total Procure/Assistance Amount Under This Project		Percent Funded by EPA (if known)	
Various	28252719		100	
		Total \$ 28,252,719.00		
Part III - Funding Methods and Billing Instructions				
35. (Note: EPA Agency Location Code (ALC) - 68010727)				
<input checked="" type="checkbox"/> Disbursement Agreement	Request for repayment of actual costs must be itemized on SF 1080 and submitted to the Financial Management Office, Cincinnati, OH 45268-7002.			
<input checked="" type="checkbox"/> Repayment	<input checked="" type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Upon Completion of Work			
<input type="checkbox"/> Advance	Only available for use by Federal agencies on working capital fund or with appropriate justification of need for this type of payment method. Unexpended funds at completion of work will be returned to EPA. Quarterly cost reports will be forwarded to the Financial Management Center, EPA, Cincinnati, OH 45268-7002.			
<input type="checkbox"/> Allocation Transfer-Out	Used to transfer obligational authority or transfer of function between Federal agencies. Must receive prior approval by the Office of Comptroller, Budget Division, Budget Formulation and Control Branch, EPA Hqtrs. Forward appropriate reports to the Financial Reports and Analysis Branch, Financial Management Division, PM-226F, EPA, Washington, DC 20460.			
36. <input type="checkbox"/> Reimbursement Agreement <input type="checkbox"/> Repayment <input type="checkbox"/> Advance				
<input type="checkbox"/> Allocation Transfer-In				
Other Agency's Billing Address (include ALC or Station Symbol Number)			Other Agency's Billing Instructions and Frequency	

Part IV - Acceptance Conditions

EPA Identification Number

DW-14-92375101 - 2

37. Terms and Conditions, when included, are located at the end of the 1610-1, or as an attachment.

Part V - Offer and Acceptance

Note: A) For Fund-out actions, the agreement/amendment must be signed by the other agency official in duplicate and one original returned to the Grants and IA Management Division for Headquarters agreements or to the appropriate EPA Regional IA administration office within 3 calendar weeks after receipt or within any extension of time that may be granted by EPA. The agreement/amendment must be forwarded to the address cited in item 29 after acceptance signature.

Failure to return the properly executed document within the prescribed time may result in the withdrawal of offer by EPA. Any change to the agreement/amendment by the other agency after the document is signed by the EPA Award Official, which the Award Official determines to materially alter the agreement/amendment, shall void the agreement/amendment.

B) For Funds-In actions, the other agency will initiate the action and forward two original agreements/amendments to the appropriate EPA program office for signature. The agreements/amendments will then be forwarded to the appropriate EPA IA administration office for signature on behalf of the EPA. EPA will return one original copy after acceptance returned to the other agency after acceptance.

EPA IA Administration Office (for administrative assistance)**EPA Program Office (for technical assistance)****38. Organization/Address****39. Organization/Address**

U.S. Environmental Protection Agency
 IASSC East
 1200 Pennsylvania Avenue, NW, Mail code: 3903R
 Washington, DC 20460

US Environmental Protection Agency
 R5 - Region 5
 77 West Jackson Blvd.
 Chicago, IL 60604-3507

Award Official on Behalf of the Environment Protection Agency


40. Digital signature applied by EPA Award Official | FOR Frank N. Roth - Chief Fellowship IA & SEE Branch
 Michelle Messick - AO delegate

Date
 09/18/2013

Authorizing Official on Behalf of the Other Agency**41. Signature****Typed Name and Title****Date**

Charles Wooley, Deputy Regional Director

9/19/13

 <p>United States Environmental Protection Agency Washington, DC 20460</p> <p>Interagency Agreement/ Amendment</p> <p>Part 1 - General Information</p>	1. EPA IA Identification Number DW-14-92375101 - 1	2. Funding Location by Region EPA R5
	3. Other Agency IA ID Number (if known)	4. Awarding Office IASSC East
	5. Type of Action Augmentation: Increase	6. IA Specialist: Lakeysha Hairston 202-564-5322 Hairston.Lakeysha@epa.gov
7. Name and Address of EPA Organization US Environmental Protection Agency IASSC East 1200 Pennsylvania Avenue, NW, Mail code 3903R Washington, DC 20460		8. Name and Address of Other Agency Department of the Interior FWS / Midwest Region 5600 American Blvd. West, Suite 990 Bloomington, MN 55437-1458
9. DUNS: 029128894	10. BETC: DISB	11. DUNS: 151157950
12. BETC: COLL		
13. Project Title and Description Great Lakes Restoration Initiative (GLRI) FY13 - U.S. Fish and Wildlife Service (USFWS) Complete the development of the GLRI Action Plan and implement priority programs, projects and activities to protect, restore and maintain the Great Lakes Ecosystem. Increase in funding		
14. EPA Project Officer (Name, Address, Telephone Number) Danielle Green 77 West Jackson Blvd. (G-17J) Chicago, IL 60604-3507 312-886-7594 E-Mail: Green.Danielle@epamail.epa.gov FAX: 312-697-2519		15. Other Agency Project Officer (Name, Address, Telephone) Charles Wooley FWS / Midwest Region 5600 American Blvd. West, Suite 990 Bloomington, MN 55437-1458 612-713-5304 E-Mail: charles_wooley@fws.gov FAX: 612-713-5284
16. Project Period: 01/11/2013 to 01/10/2017		17. Budget Period: 01/11/2013 to 01/10/2017
18. Scope of Work (See Attachment) See attached revise Scope of Work		
19. Employer/Tax ID No. 520852695		20. CAGE No: 347A4
		21. ALC: 68-01-0727
22. Statutory Authority for Transfer of Funds and Interagency Agreement Consolidated Appropriations Act: 2012; Public Law 112-74		23. Other Agency Type Federal Agency
24. Revise Reimbursable Funds and Direct Fund Cites (only complete if applicable)		
	Previous Funding	This Action
Revise Reimbursable (in-house)		0
Direct Fund Cite (contractor)		0
Total		0
Funds	Previous Amount	Amount This Action
25. EPA Amount	\$1,048,677	\$39,500,560
26. EPA In-Kind Amount		\$0
27. Other Agency Amount		\$0
28. Other Agency In-Kind Amount		\$0
29. Total Project Cost	\$1,048,677	\$39,500,560
30. Fiscal Information		
Treas. Symbol	DCN	FY
683X40108	1305HDX023	1314
683X40108	1305HDX023	1314
683X40108	1305HDX023	1314
Appropriation	Budget Org	PRC
B	05HN0	202BJ7XF1
B	05HN1	202BJ7XF1
B	05HN0	202BJ7XF2
Object Class	Site/Project	Cost Org
2506		
2506		
2506		
Ob/De-Ob Amt		
2,139,072		
350,000		
5,789,437		

Fiscal (Continued)									
Treas. Symbol	DCN	FY	Appropriation	Budget Org	PRC	Object Class	Site/Project	Cost Org	Ob/De-Ob Amt
683X40108	1305HDX023	1314	B	05HN2	202BJ7XF2	2506	-	-	8,853,000
683X40108	1305HDX023	1314	B	05HN0	202BJ7XF4	2506	-	-	22,226,551
683X40108	1305HDX023	1314	B	05HN0	202BJ7XF5	2506	-	-	142,500
									39,500,560

Part II - Approved Budget				EPA IAG Identification Number DW-14-92375101 - 1
31. Budget Categories	Itemization of All Previous Actions	Itemization of This Action	In-Kind Itemization of This Action	Itemization of Total Project Cost to Date
(a) Personnel	\$334,250	\$4,840,054		\$5,174,304
(b) Fringe Benefits	\$129,100	\$1,687,258		\$1,816,358
(c) Travel	\$0	\$1,117,954		\$1,117,954
(d) Equipment	\$75,000	\$1,971,957		\$2,046,957
(e) Supplies	\$0	\$0		\$0
(f) Procurement / Assistance	\$284,867	\$27,967,852		\$28,252,719
(g) Construction	\$0	\$0		\$0
(h) Other	\$194,000	\$730,468		\$924,468
(i) Total Direct Charges	\$1,017,217	\$38,315,543	\$0	\$39,332,760
(j) Indirect Costs:	\$31,460	\$1,185,017		\$1,216,477
Charged - Amount Rate: 3% Base: \$ Not Charged: Funds-Out: Not charged by Other Agency Estimate by other Agency Amount \$				
(k) Total (EPA Share %) (Other Agency Share %)	\$1,048,677	\$39,500,560	\$0	\$40,549,237
32. How was the IDC Base calculated?				
33. Is equipment authorized to be furnished by EPA or leased, purchased, or rented with EPA funds? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Identify all equipment costing \$1,000 or more)				
34. Are any of these funds being used on Procure/Assistance agreements? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
Type of Procure/Assistance Agreement Grant ; Cooperative Agreement ; Contract				
Contractor/Recipient Name (if known)	Total Procure/Assistance Amount Under This Project		Percent Funded by EPA (if known)	
Various	28252719 Total \$ 28,252,719.00		100	
Part III - Funding Methods and Billing Instructions				
35.	(Note: EPA Agency Location Code (ALC) - 68010727)			
<input checked="" type="checkbox"/> Disbursement Agreement	Request for repayment of actual costs must be itemized on SF 1080 and submitted to the Financial Management Office, Cincinnati, OH 45268-7002.			
<input checked="" type="checkbox"/> Repayment	<input checked="" type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Upon Completion of Work			
<input type="checkbox"/> Advance	Only available for use by Federal agencies on working capital fund or with appropriate justification of need for this type of payment method. Unexpended funds at completion of work will be returned to EPA. Quarterly cost reports will be forwarded to the Financial Management Center, EPA, Cincinnati, OH 45268-7002.			
<input type="checkbox"/> Allocation Transfer-Out	Used to transfer obligational authority or transfer of function between Federal agencies. Must receive prior approval by the Office of Comptroller, Budget Division, Budget Formulation and Control Branch, EPA Hdqtrs. Forward appropriate reports to the Financial Reports and Analysis Branch, Financial Management Division, PM-226F, EPA, Washington, DC 20460.			
36. <input type="checkbox"/> Reimbursement Agreement	<input type="checkbox"/> Repayment <input type="checkbox"/> Advance			
<input type="checkbox"/> Allocation Transfer-In				
Other Agency's Billing Address (include ALC or Station Symbol Number)			Other Agency's Billing Instructions and Frequency	

Part IV - Acceptance Conditions

EPA Identification Number

DW-14-92375101 - 1

37. Terms and Conditions, when included, are located at the end of the 1610-1, or as an attachment.

Part V - Offer and Acceptance

Note: A) For Fund-out actions, the agreement/amendment must be signed by the other agency official in duplicate and one original returned to the Grants and IA Management Division for Headquarters agreements or to the appropriate EPA Regional IA administration office within 3 calendar weeks after receipt or within any extension of time that may be granted by EPA. The agreement/amendment must be forwarded to the address cited in item 29 after acceptance signature.

Failure to return the properly executed document within the prescribed time may result in the withdrawal of offer by EPA. Any change to the agreement/amendment by the other agency after the document is signed by the EPA Award Official, which the Award Official determines to materially alter the agreement/amendment, shall void the agreement/amendment.

B) For Funds-In actions, the other agency will initiate the action and forward two original agreements/amendments to the appropriate EPA program office for signature. The agreements/amendments will then be forwarded to the appropriate EPA IA administration office for signature on behalf of the EPA. EPA will return one original copy after acceptance returned to the other agency after acceptance.

EPA IA Administration Office (for administrative assistance)

EPA Program Office (for technical assistance)

38. Organization/Address

39. Organization/Address

U.S. Environmental Protection Agency
IASSC East
1200 Pennsylvania Avenue, NW Mail code 3903R
Washington, DC 20460

US Environmental Protection Agency
R5 - Region 5
77 West Jackson Blvd.
Chicago, IL 60604-3507

Award Official on Behalf of the Environment Protection Agency

40. Digital signature applied by EPA Award Official: Frank N. Roth - Chief Fellowship IA & SEE Branch

Date

06/19/2013

Authorizing Official on Behalf of the Other Agency


Signature

Typed Name and Title

Date

Charles Wooley, Deputy Regional Director

6/21/13

 <p style="text-align: center;">United States Environmental Protection Agency Washington, DC 20460</p> <p style="text-align: center;">Interagency Agreement/ Amendment</p> <p style="text-align: center;">Part 1 - General Information</p>	1. EPA IA Identification Number DW-14-92375101-0		2. Funding Location by Region EPA R5						
	3. Other Agency IA ID Number (if known)		4. Awarding Office IASSC East						
	5. Type of Action New		6. IA Specialist: Lakeysha Hairston 202-564-5322 Hairston.Lakeysha@epa.gov						
7. Name and Address of EPA Organization US Environmental Protection Agency IASSC East 1200 Pennsylvania Avenue, NW Mail code 3903R Washington, DC 20460			8. Name and Address of Other Agency Department of the Interior FWS / Midwest Region 5600 American Blvd, West, Suite 990 Bloomington, MN 55437-1458						
9. DUNS: 029128894		10. BETC: DISB		11. DUNS: 151157950					
12. BETC: COLL									
13. Project Title and Description Great Lakes Restoration Initiative (GLRI) FY13 - U.S. Fish and Wildlife Service (USFWS) Complete the development of the GLRI Action Plan and implement priority programs, projects and activities to protect, restore and maintain the Great Lakes Ecosystem.									
14. EPA Project Officer (Name, Address, Telephone Number) Danielle Green 77 West Jackson Blvd. (G-17J) Chicago, IL 60604-3507 312-886-7594 E-Mail: Green.Danielle@epamail.epa.gov FAX: 312-697-2519			15. Other Agency Project Officer (Name, Address, Telephone) Charles Wooley FWS / Midwest Region 5600 American Blvd, West, Suite 990 Bloomington, MN 55437-1458 612-713-5304 E-Mail: charles_wooley@fws.gov FAX: 612-713-5284						
16. Project Period: 01/11/2013 to 01/10/2017			17. Budget Period: 01/11/2013 to 01/10/2017						
18. Scope of Work (See Attachment) See attached Scope of Work									
19. Employer/Tax ID No. 520852695		20. CAGE No: 347A4		21. ALC: 68-01-0727					
22. Statutory Authority for Transfer of Funds and Interagency Agreement Consolidated Appropriations Act, 2012; Public Law 112-74				23. Other Agency Type Federal Agency					
24. Revise Reimbursable Funds and Direct Fund Cites (only complete if applicable)									
	Previous Funding		This Action		Amended Total				
Revise Reimbursable (in-house)			0		0				
Direct Fund Cite (contractor)			0		0				
Total					0				
	Previous Amount		Amount This Action		Total Amount				
25. EPA Amount			\$1,048,677		\$1,048,677				
26. EPA In-Kind Amount					\$0				
27. Other Agency Amount			\$0		\$0				
28. Other Agency In-Kind Amount			\$0		\$0				
29. Total Project Cost			\$1,048,677		\$1,048,677				
30. Fiscal Information									
Treas. Symbol	DCN	FY	Appropriation	Budget Org	PRC	Object Class	Site/Project	Cost Org	Ob/De-Ob Amt
682/30108	1305HDX013	1213	B	05HNO	202BJ7XF1	2506			593,677
682/30108	1305HDX013	1213	B	05HNO	202BJ7XF2	2506			30,000
682/30108	1305HDX013	1213	B	05HNO	202BJ7XF4	2506			425,000
									1,048,677

Part II - Approved Budget				EPA IAG Identification Number DW-14-92375101 - 0
31. Budget Categories	Itemization of All Previous Actions	Itemization of This Action	In-Kind Itemization of This Action	Itemization of Total Project Cost to Date
(a) Personnel		\$334,250	\$0	\$334,250
(b) Fringe Benefits		\$129,100	\$0	\$129,100
(c) Travel		\$0	\$0	\$0
(d) Equipment		\$75,000	\$0	\$75,000
(e) Supplies			\$0	\$0
(f) Procurement / Assistance		\$284,867	\$0	\$284,867
(g) Construction			\$0	\$0
(h) Other		\$194,000	\$0	\$194,000
(i) Total Direct Charges	\$0	\$1,017,217	\$0	\$1,017,217
(j) Indirect Costs:	\$0	\$31,460	\$0	\$31,460
Charged - Amount Rate: % Base: \$ Not Charged: Funds-Out: Not charged by Other Agency Estimate by other Agency Amount: \$				
(k) Total (EPA Share: %) (Other Agency Share: %)	\$0	\$1,048,677	\$0	\$1,048,677
32. How was the IDC Base calculated?				
33. Is equipment authorized to be furnished by EPA or leased, purchased, or rented with EPA funds? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Identify all equipment costing \$1,000 or more)				
34. Are any of these funds being used on Procure/Assistance agreements? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
Type of Procure/Assistance Agreement Grant; Cooperative Agreement; Contract				
Contractor/Recipient Name (if known)	Total Procure/Assistance Amount Under This Project		Percent Funded by EPA (if known)	
TBD	284867 Total: \$ 284,867.00		100	
Part III - Funding Methods and Billing Instructions				
35. (Note: EPA Agency Location Code (ALC) - 68010727)				
<input checked="" type="checkbox"/> Disbursement Agreement	Request for repayment of actual costs must be itemized on SF 1080 and submitted to the Financial Management Office, Cincinnati, OH 45268-7002.			
<input checked="" type="checkbox"/> Repayment	<input checked="" type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Upon Completion of Work			
<input type="checkbox"/> Advance	Only available for use by Federal agencies on working capital fund or with appropriate justification of need for this type of payment method. Unexpended funds at completion of work will be returned to EPA. Quarterly cost reports will be forwarded to the Financial Management Center, EPA, Cincinnati, OH 45268-7002.			
<input type="checkbox"/> Allocation Transfer-Out	Used to transfer obligational authority or transfer of function between Federal agencies. Must receive prior approval by the Office of Comptroller, Budget Division, Budget Formulation and Control Branch, EPA Hqtrs. Forward appropriate reports to the Financial Reports and Analysis Branch, Financial Management Division, PM-226F, EPA, Washington, DC 20460.			
36. <input type="checkbox"/> Reimbursement Agreement	<input type="checkbox"/> Repayment <input type="checkbox"/> Advance			
<input type="checkbox"/> Allocation Transfer-In				
Other Agency's Billing Address (include ALC or Station Symbol Number)			Other Agency's Billing Instructions and Frequency	

Part IV - Acceptance Conditions

EPA Identification Number

DW-14-92375101 - 0

37. Terms and Conditions, when included, are located at the end of the 1610-1, or as an attachment.

Part V - Offer and Acceptance

Note: A) For Fund-out actions, the agreement/amendment must be signed by the other agency official in duplicate and one original returned to the Grants and IA Management Division for Headquarters agreements or to the appropriate EPA Regional IA administration office within 3 calendar weeks after receipt or within any extension of time that may be granted by EPA. The agreement/amendment must be forwarded to the address cited in item 29 after acceptance signature.

Failure to return the properly executed document within the prescribed time may result in the withdrawal of offer by EPA. Any change to the agreement/amendment by the other agency after the document is signed by the EPA Award Official, which the Award Official determines to materially alter the agreement/amendment, shall void the agreement/amendment.

B) For Funds-In actions, the other agency will initiate the action and forward two original agreements/amendments to the appropriate EPA program office for signature. The agreements/amendments will then be forwarded to the appropriate EPA IA administration office for signature on behalf of the EPA. EPA will return one original copy after acceptance returned to the other agency after acceptance.

EPA IA Administration Office (for administrative assistance)

EPA Program Office (for technical assistance)

38. Organization/Address

39. Organization/Address

U.S. Environmental Protection Agency
IASSC East
1200 Pennsylvania Avenue, NW, Mail code 3903R
Washington, DC 20460

US Environmental Protection Agency
R5 - Region 5
77 West Jackson Blvd.
Chicago, IL 60604-3507

Award Official on Behalf of the Environment Protection Agency

40. Digital signature applied by EPA Award Official | FOR Frank N. Roth - Chief Fellowship IA & SEE Branch
Michelle Messick - AO delegate

Date


01/15/2013

Authorizing Official on Behalf of the Other Agency

41. Signature

Typed Name and Title

Date



Charles Wooley, Deputy Regional Director

1/17/13

Great Lakes Restoration Initiative Interagency Agreement Scope of Work FY 2013

AGENCY NAME: U.S. Fish and Wildlife Service

CONTACT INFORMATION: Amy McGovern (312-886-1474); Bob Krska (612-713-5103)

1. INTRODUCTION

Consistent with the mission of the U.S. Fish and Wildlife Service (Service) and related statutes, authorities, policies, programs, priorities, activities, and unique expertise, the Service has been a proactive participant working in close partnership with stakeholders in long-standing efforts to conserve fish, wildlife, and plants and their habitats throughout the Great Lakes Basin. The Service was an active participant in development and implementation of the Great Lakes Collaboration and continues with the Great Lakes Restoration Initiative (GLRI). As described in this Interagency Agreement, the Service is focusing on high priority activities to protect, maintain, restore, and enhance the Great Lakes ecosystem that will contribute to achievement of measurable results identified in the GLRI Action Plan.

The purpose of this Interagency Agreement is to provide funding to the Service to supplement Service activities to address priorities of the GLRI. In short, each of the Service's projects described in this Interagency Agreement will address measures described for each template (project). In addition to making progress on GLRI Action Plan outcomes, the Service's efforts made possible through this agreement will also support priorities, programs, and projects related to the amended Great Lakes Water Quality Agreement and associated efforts, including Lakewide Management Plans, Remedial Action Plans for Areas of Concern (AOCs), Habitat and Species protection and restoration, Aquatic Invasive Species, and Cooperative Science and Monitoring Initiatives, among others.

Of the five Focus Areas identified as priority areas in the GLRI Action Plan, the Service's activities funded through GLRI will directly support goals and objectives within four Focus Areas: Toxic Substances and Areas of Concern; Invasive Species; Habitat and Wildlife Protection and Restoration; and, Accountability, Education, Monitoring, Evaluation, Communication and Partnerships. However, as is true with the interconnectedness of components of the Great Lakes ecosystem, Service activities and achievements in each of these Focus Areas support goals identified throughout the five Focus Areas.

The Service has contributed substantively to progress Federal agencies are making in achieving GLRI Action Plan Measures of Progress. Among the notable accomplishments include the following:

- Planning for and implementing habitat restorations associated with several AOCs, including the Black River, Grand Calumet River, St. Louis River and Detroit River.
- Information contributing to assessing progress in delisting Beneficial Use Impairments, including a preliminary assessment of incidence rates of fish tumors and deformities for the St. Louis River AOC; assessment of population, reproductive, and health Impairments in colonial water birds breeding in Michigan's AOCs; updating the Conservation and

Recreation Lands (CARL) Database and Assess Indicator Species in the Saginaw River/Bay AOC; assessing avian reproductive impairment and degradation of benthos in the Grand Calumet AOC; assessing fish tumors and deformities, sediment remediation, and habitat restoration in the Buffalo River, Eighteenmile Creek, Rochester Embayment, and Niagara River AOCs; and, evaluating fish as vectors of contaminants for restoring river connectivity in the Saginaw River/Bay AOC

- Assigned 1,400 species for invasive species risk assessment; completed about 600 draft species risk assessment reports; risk assessments for the remaining species are being conducted
- All eight Great Lakes states are implementing their Aquatic Nuisance Species Management Plan to protect the Great Lakes. Some tribes received GLRI funding in FY2011 and FY2012 to develop and implement aquatic invasive species management plans. Actions taken by all entities include invasive species monitoring, rapid response, outreach, and control. The State of Illinois has been a leader in efforts to protect the Great Lakes from invasion of Asian carps via the Chicago Area Waterways System.
- In FY2010, FY2011 and FY2012, lake trout restoration accomplishments included enhanced population assessment and modeling throughout the basin, genetics work, radio tracking, coded wire tagging, increased fish production, emerging fish disease evaluations and diagnostic work, and improvements to the infrastructure at multiple National Fish Hatcheries.
- In FY2010, FY2011, and FY2012 lake trout restoration activities included enhanced population assessment and modeling throughout the basin, genetics work, radio tracking, coded wire tagging, increased fish production, emerging fish disease evaluations and diagnostic work, and improvements to the infrastructure at multiple national fish hatcheries in two Regions of the FWS. Lake sturgeon activities included enhanced population assessment and modeling throughout the basin, larval fish evaluations, habitat evaluations, radio tracking, rearing, stocking, and assessment of stream-side propagation techniques. Funding has also supported the pursuit of criminal investigations focused on illegal take of Great Lakes lake trout and lake sturgeon populations.
- The Service announced the delisting of the Lake Erie Watersnake in 2011; as a result of GLRI support, requisite post-delisting activities were assured, thereby achieving final delisting of that species.
- GLRI funding received in FYs 2010-FY2012 has significantly contributed to the long-term protection goals for imperiled fish and wildlife populations in the basin, such as piping plover and Pitcher's thistle.
- The Service's watershed habitat and species restoration initiative has protected, restored or enhanced over 2,000 acres of wetlands and uplands; removed or bypassed over 20 fish passage barriers, and reopened over 200 stream miles to fish movement.
- The Service, applying its land acquisition authorities, has acquired the following parcels/acreages being managed for fish and wildlife resources: Sugar Island - 144 acres and 29 acres; Walker tract - 180 acres). In addition, we have monitored colonial water bird resources on Hat, Jack, Cat, Gull, and Poverty Islands and monitored vegetation on Jack, Hat, Cat, and Birds Tree Islands.
- The Upper Midwest-Great Lakes Landscape Conservation Cooperative has provided GLRI funding through grants based on Requests for Proposals in FY2010, FY2011 and FY2012. Some of these projects, which address such things as aquatic connectivity and climate change (species vulnerability, adaptation strategies, and related), map to several Measures of Progress and support many GLRI-funded projects.

- The Service purchased in FY 2011 with GLRI funds two avian radar systems. We deployed the units during spring and fall migration seasons on Lakes Michigan and Huron in conjunction with 24 acoustic/ultrasonic monitors distributed along Great Lakes shorelines. Data collected from FY2011 and FY2012 are being analyzed.
- The Service's long-term goals, consistent with our mission, are to conserve, protect, and enhance sustainable fish and wildlife and plants and their habitats throughout the Great Lakes Basin. We pursue these goals with base, project-specific, and other related funding sources. The Service's short-term goals, as they relate to this Interagency Agreement, are to supplement the Service's high priority conservation, protection, and enhancement activities in pursuit of the GLRI's Action Plan goals. GLRI goals and associated objectives, identified in the GLRI Action Plan and extending through FY2014, are achieved by agency contributions of measureable outputs (Measures of Progress) to achieving each measure's targets. As described in our templates, the Service will contribute measureable outputs that will contribute substantially to achievement of targets and, ultimately, Action Plan goals and objectives.

The Service requests an obligation extension of FY2013 funds to June 30, 2014 to allow for competitive sub-granting programs to award funds early in the field season. Per the terms and conditions of this agreement, monthly reporting of obligations will begin one year from approval.

The Service also requests that the budget period for the FY2013 agreement be set to extend into FY2017. A similar extension, which was approved in the Service's FY2010, FY2011 and FY 2012 interagency agreements, allows for the completion of and expenditures on non-severable projects in the agreement, e.g., multi-year habitat restoration projects.

Following the submittal of this IA on October 22, 2012, the Service will work with our EPA Project Officer to finalize the FY2013 Continuing Resolution allocation process and the prioritization of funding for Service projects, as described below.

2. BUDGET & PROJECT DETAIL

Focus Area	Project Title (template no.)	Draft Allocation
TX	Accelerating Remediation and Restoration Contaminated Sediment (020)	\$1,300,000
TX	Early Warning to Identify Effects of New Contaminants (021)	\$1,600,000
IS	Aquatic Invasive Species Prevention Program (024)	\$200,000
IS	Integrated Pest Management for Priority Species (026)	\$1,000,000
H	Implementing the Great Lakes Fish & Wildlife Restoration Act (027)	\$1,500,000
H	Restoration of Lake Trout & Lake Sturgeon in the Great Lakes (028)	\$6,619,000
H	Great Lakes Basin Endangered Species Recovery Initiative (030)	\$600,000
H	Great lakes Watershed Habitat & Species	\$3,000,000

	Restoration Initiative (031)	
H	Conservation of Great Lakes Islands and Coasts (032)	\$400,000
H	Great Lakes Landscape Conservation Cooperative (034)	\$500,000
H	Great Lakes Wind Power: Making it Wildlife Friendly (036)	\$500,000
H	Great Lakes Basin Fish Habitat Partnership (037)	\$400,000
H	Sustain Our Great Lakes – Habitat (155)	\$3,138,000
H	Sustain Our Great Lakes – Areas of Concern (157)	\$5,236,000
IS	State & Tribal Aquatic Nuisance Species Management (189)	\$5,353,039
H	Mass Marking of Great Lakes Trout and Salmon (305)	\$1,500,000
AEMECP	FWS LaMP Coordination and Implementation (331)	\$150,000
IS	Asian Carp Framework Projects - USFWS (671)	\$2,630,000
IS	Asian Carp Framework Projects – States (672)	\$5,210,000
	Total	\$40,836,039

3. NARRATIVE SCOPES OF WORK:

Title: Accelerating Remediation and Restoration of Contaminated Sediment at AOCs (Template No. 020)

Funding: \$1,300,000

Authority: Great Lakes Fish and Wildlife Restoration Act of 2006, Clean Water Act

Work: The Service's environmental contaminant specialists in Great Lakes Ecological Services field offices will continue to work with Federal, State, and local partners to eliminate the effects of contaminants in Areas of Concern (AOC). Service contaminants specialists will work with partners to guide remediation of contaminants to remove pathways and mechanisms by which contaminants impair beneficial uses, design sediment removal projects to achieve the best, most efficient cleanups while preserving and restoring high quality habitat in Great Lakes AOCs. Selected remediation and restoration projects will contribute to elimination of Beneficial Use Impairments (BUI) to return AOC aquatic ecosystems to full function.

On September 7, 2012 Canada and the United States committed to cooperating and coordinating efforts to address critical threats to Great Lakes water quality, including measures to prevent ecological harm. Among the issues specified are:

- Preventing environmental threats before they turn into actual problems.
- Developing plans to protect and restore nearshore areas, the primary source of drinking water for Great Lakes communities and where most commerce and recreation occurs.
- Reaffirming actions necessary to restore and delist Areas of Concern.
- Developing conservation strategies to protect native species and restore habitat.

The "Accelerating Remediation and Restoration of Contaminated Sediment at AOCs" project directly addresses the above Great Lakes issues. Specifically, the Service will continue to provide technical assistance to the Great Lakes National Program Office (GLNPO) Sediment Team on Great Lakes Legacy Act funded projects and look for opportunities to use previous Natural Resource Damage Assessment settlement funds to collaborate with partners on restoration projects. The Service will continue to evaluate habitat restoration and landscape management plans available for AOCs to determine which AOCs present the best opportunities to help meet delisting targets for BUIs in areas currently impacted by contaminated sediment. Using principles of ecological restoration and ecotoxicology, Service biologists will continue to work with Federal, State, and local conservation partners to identify site specific (e.g., "hotspots") habitat and species conservation goals, evaluate contaminants causing impairments, and perform scientific analyses to identify actions needed to eliminate the contaminants.

Milestones:

March 1, 2013	Select specific projects for funding
May 30, 2013	Complete necessary agreements/contracts
May 2013 – October 2013	Conduct any necessary field work
Ongoing through 2013	Evaluate data/information
Annually	Reports

Great Lakes Action Plan Measure of Progress: This project contributes directly to the following GLRI Action Plan Toxic Substances and Areas of Concern Focus Area measures:

- Number of Areas of Concern in the Great Lakes where all management actions necessary for delisting have been implemented (Measure No. 1)

- AOC BUIs removed (Measure No. 2)
- BUI removal project starts at AOCs (Measure No. 3)
- Cubic yards of contaminated sediment remediated in the Great Lakes (Measure No. 4)

This template will address several specific BUIs, including fish consumption advisories, degradation of fish and wildlife populations, fish tumors and deformities, degradation of benthos, and loss of fish and wildlife habitat. 8-10 BUI removal project starts are estimated for FY2013. Projects will be done through out the basin and will either help to assess progress toward BUI removal targets or implement on-the-ground actions to restore habitat acres or stream miles that are necessary for removal.

These projects reinforce Goal 5 of the Action Plan and will protect fish and wildlife populations and their habitats from adverse chemical and biological effects associated with the presence of toxins in the Great Lakes.

Contact: Annette Trowbridge, annette_trowbridge@fws.gov, (612) 713- 5104

Title: Early Warning to Identify Effects of New Contaminants (Contaminants of Emerging Concern) (Template No. 2012-021)

Funding: \$1,600,000

Authority: Great Lakes Fish and Wildlife Restoration Act of 2006, Clean Water Act

Work: As recognized in the Great Lakes Restoration Initiative Action Plan, one of the serious challenges the Great Lakes face is the presence of toxic substances including newly recognized chemicals of concern (CEC) that are potential threats to the chemical integrity of the Great Lakes.

In addition, on September 7, 2012 Canada and the United States committed to cooperating and coordinating efforts to address critical threats to Great Lakes water quality, including measures to prevent ecological harm. Among the issues specified are:

- Preventing environmental threats before they turn into actual problems.
- Identifying new toxic substances, and implementing pollution prevention and control strategies.
- Developing conservation strategies to protect native species and restore habitat.
- Developing water quality and ecosystem health objectives.
- Reviewing Great Lakes science and establishing binational priorities for future work.
- Providing notification of activities that could impact the Great Lakes.
- Reporting progress to the public regularly.

The “Early Warning to Identify Effects of New Contaminants (Contaminants of Emerging Concern)” project directly addresses the above Great Lakes issues and supports the goals and objectives of the Great Lakes Water Quality Agreement and the Great Lakes Bi-National Toxics Strategy. Currently, there are few data available regarding effects of CECs on fish and wildlife. The need for additional information on CECs to make well-informed and science based resource management decisions cannot be overstated. It is important to not only understand these compounds with respect to their concentrations in the environment but to also understand their toxicity and routes of exposure and relate this information to lethal and sub-lethal impacts. This information is needed to make science-based resource management decisions and recommendations for effective control strategies to minimize adverse consequences. Failure to identify these contaminants of emerging concern may result in deleterious impacts to Great Lakes resources with associated adverse economic and recreational consequences.

The following goals and objectives for this project, which will be implemented by Service Environmental Contaminants Specialists located in our field offices in collaboration with project partners, will guide project implementation:

Goal #1: Determine the extent to which contaminants of emerging concern (CEC) may be presenting a risk to fish and wildlife resources.

Objectives:

- 1) Measure the concentration of select CECs across time in water, sediment and fish at locations in the Great Lakes that have been characterized as Areas of Concern (AOC) by the EPA, as well as at reference locations.
- 2) Compare concentrations of CECs between AOC locations to determine areas that have increased concentrations of CECs.

- 3) Compare concentrations of CECs between sites at each location to determine possible sources for CEC introduction.
- 4) Determine if the CECs that are being analyzed are associated with observed exposure effects in fish samples.
- 5) Determine if select CECs are of higher concern than others.

Goal #2: Recommend controls/regulations or resource management actions to prevent or reduce adverse impacts to fish and wildlife resources in the future

Objectives:

- 1) Establish a bibliographic database resulting from the literature search.
- 2) Compare concentrations of select CECs at AOC locations to known effect concentrations, as determined through bibliographic database from #1, to determine areas most at risk to cause effects in fish and wildlife.
- 3) Analyze select response endpoints in fish to determine possible CEC exposure. Compare fish responses between locations to determine areas of increased exposure effects.

Goal #3: Coordinate and collaborate with other Federal agencies (EPA, NOAA, USGS, etc.) involved in the program to ensure efficient and effective research.

Objectives:

- 1) Establish a spatially-explicit relational database for collecting project study information and related literature.
- 2) Explore recommendations from other Federal agencies to ensure research is contributing to the protection of USFWS Trust Resources, as outlined in Goal #2.

Milestones:

April 2013 – June 2013	Sample collection conducted
May 2013 – September 2013	Sample analysis for select analytes
Ongoing through 2013	Data analysis
Ongoing through 2013	Refinement and population of database

Great Lakes Action Plan Measure of Progress: Although this work does not directly map to a performance metric tracked in the GLRI Action Plan for the Toxic Substances and Areas of Concern Focus Area, this project will facilitate the Action Plan objective to remove several BUIs, including fish consumption advisories, degradation of fish and wildlife populations, fish tumors and deformities, degradation of benthos, and loss of fish and wildlife habitat.

This comprehensive effort contributes directly to Goal 5: “The health and integrity of wildlife populations and habitat are protected from adverse chemical and biological effects associated with the presence of toxic substances in the Great Lakes Basin.” The project also responds directly to the principal action, *Measuring Progress and Assessing New Toxic Threats*, of the Action Plan, which underlines the importance and necessity of robust surveillance (laboratory and field studies) efforts in the Great Lakes to identify significant sources and impacts of new toxics to fish and wildlife populations.

Work will be conducted in the Lakes Michigan, Huron, Erie and Ontario basins.

Contact: Annette Trowbridge, annette_trowbridge@fws.gov, (612) 713- 5104

Title: Aquatic Invasive Species Prevention Program (Template No. 2013-024)

Funding: \$200,000

Authority: Nonindigenous Aquatic Nuisance Prevention and Control Act, as amended

Work: The U.S. Fish and Wildlife Service (FWS) will establish and implement an aquatic invasive species risk assessment program that supports decisions for Federal and State regulation, industry self-regulation, and habitat restoration programs and projects. That program will implement, when needed and requested, a rapid screening process to assess risk of establishment and significant, negative impacts of nonnative species that:

- Are imported and traded (including and especially pet, water garden, and aquaculture trades), with a focus on invasion risk to the Great Lakes Basin
- May expand abundance and/or distribution as the projected result from habitat restoration and enhancement under the Great Lakes Restoration Initiative. These risk assessments will be conducted at the request of other Federal, and Regional, (e.g., Great Lakes Fishery Commission), State, Tribal, and local governments, industries, and nongovernmental organizations.

The rapid screening process consists of the following two foundational elements:

- Matching climate of a nonnative species' range elsewhere in the world with that of the Great Lakes (and other portions of the continental U.S.)
- Documenting the history of the subject species' invasiveness in the world (using information and data acquired, analyzed, and synthesized from databases and peer-reviewed literature).

Based on those foundational elements, projections of impacts to the U.S. will be synthesized and summarized by trained risk assessors.

This project is complementary to other invasive species efforts in the basin, including the Great Lakes Mississippi River Interbasin Study (GLMRIS) coordinated through the Army Corps of Engineers, and the Great Lakes Aquatic Nonindigenous Species Information System (GLANSIS) administered by the National Oceanic and Atmospheric Administration. Unlike the FWS prevention program which is most often conducting risk assessments for nonnative species *not* known to be established in the U.S., the GLMRIS program is focused on species already established in either the Mississippi Basin or the Great Lakes Basin. The FWS program also complements the information available in GLANSIS, which is focused on ballast-mediated species in the Great Lakes.

These information resources, in combination with other State and Federal efforts, constitute our most comprehensive effort to prevent the establishment and impact of additional invasive species in the Great Lakes.

An example risk assessment report (aka Ecological Risk Screening Report) is included as an attachment to this interagency agreement.

Milestones: Risk assessments will begin within 30 days after receiving GLRI funds for this project; all assessments will be completed within one year.

Great Lakes Action Plan Measure of Progress: The FWS will conduct risk assessments for up to 200 nonnative species not established in the Great Lakes, but are either traded or could be traded within the Great Lakes Basin. Assessment results can be used for regulatory (Federal and State, provincial) and non-regulatory activities. Although this work does not directly map to a

performance metric tracked in the GLRI Action Plan for the Invasive Species Focus Area, this project directly responds to the Action Plan Principal Action to: *Implement Early Actions to Address Water Pathways Vectors*, which calls for an identification of key waterways that could introduce new aquatic nuisance species to the Great Lakes and implement actions to reduce risk. States, the FWS, cities, and other regulatory authorities can use FWS risk assessment reports to support regulatory actions to reduce risk. Industries can use those risk assessment reports to support voluntary risk reduction activities, including no import of selected not presently regulated. This comprehensive effort also contributes directly to Goal 2: "The risk of introduction of species, which are imported for various uses, into the Great Lakes is minimized."

Contact: Mike Hoff, michael_hoff@fws.gov, (612) 713-5114

Title: Integrated Pest Management for Priority Species (Template No. 2013-026)

Funding: \$1,000,000

Authority: Nonindigenous Aquatic Nuisance Prevention and Control Act, as amended

Work: This project will continue to develop and implement a Great Lakes Aquatic Invasive Species Integrated Management Program (Program) to implement rapid response, control, and management activities and programs, assess effectiveness of those programs, and adapt them as needed. Specifically, this Program will continue to: 1) develop, test, and implement a biologically and statistically tenable early detection program for newly introduced invasive species into the Great Lakes and adapt methods to detect newly introduced invasive species, and 2) participate in rapid response actions, if needed. It will enhance early detection monitoring for Aquatic Invasive Species and support participation in rapid response actions.

Milestones:

Ongoing through September 2013

Project implementation

Great Lakes Action Plan Measure of Progress:

The Service and partners will implement 75 early detection surveys in the field. Enhanced monitoring developed and implemented through this template will continue to contribute information to document assess the metric: rate of nonnative species newly detected in the Great Lakes ecosystem. In addition, the program addresses one of nine priorities of the Council of Great Lakes Governors and supports State and Interstate Management Aquatic Nuisance Species Plans, which are approved for each State by the Aquatic Nuisance Species Task Force.

Although this work does not directly map to a performance metric tracked in the GLRI Action Plan for the Invasive Species Focus Area, this project directly supports Invasive Species Focus Area Goals 4 (A comprehensive program for detection and tracking newly identified invasive species in the Great Lakes is developed and provides up-to-date critical information needed by decision makers for evaluating potential rapid response actions) and 5 (An effective, efficient and environmentally sound program of integrated pest management for invasive species is developed and implemented, including program functions of containment, eradication, control and mitigation).

Contact: Aaron Woldt, aaron_woldt@fws.gov, (612) 713-5110, Michael Hoff,
Michael_Hoff@fws.gov, (612) 713-5114

Title: Implementing the Great Lakes Fish and Wildlife Restoration Act (Template No. 2012-027)

Funding: \$1,500,000

Authority: Great Lakes Fish and Wildlife Restoration Act of 2006

Work: Implementation of the Act directly supports long-term habitat goals identified in the GLRI Action Plan for protecting and conserving Great Lakes fish and wildlife populations, as well as important fish and wildlife habitats. The Great Lakes Fish and Wildlife Restoration Act (Act) is the primary federal program dedicated to restoring important fish and wildlife and the habitat they depend on in the Great Lakes. The Act enables the eight Great Lakes States, Native American Tribes, and private interests to collaborate in implementing practical solutions to restore and conserve the region's fish and wildlife resources. The purposes of the Great Lakes Fish and Wildlife Restoration Act of 2006 are to develop and implement proposals for the restoration of fish and wildlife resources and their habitats in the Great Lakes Basin and to provide assistance to the Great Lakes Fisheries Commission, States, Indian Tribes, and other interested entities to encourage cooperative conservation, restoration and management of the fish and wildlife resources and their habitat in the Great Lakes Basin.

Project implementation, through on-the-ground-habitat and research efforts to answer important conservation questions, will enhance populations of lake sturgeon, brook trout, migratory birds, threatened and endangered species, and other native aquatic and terrestrial species of fish and wildlife within the Great Lakes Basin. These efforts will help achieve self-sustaining aquatic populations and contribute to acres and miles of habitat protected, restored, or enhanced. In administering this program in relation to the Great Lakes Basin, the Director shall seek to achieve the following goals:

- Restore and maintain self-sustaining fish and wildlife resources
- Minimize the impacts of contaminants on fishery and wildlife resources
- Protect, maintain, and, where degraded and destroyed, restore fish and wildlife habitat, including enhancement and creation of wetlands that result in a net gain in the amount of those habitats
- Stop illegal activities adversely impacting fishery and wildlife resources
- Restore threatened and endangered species to viable, self-sustaining levels
- Protect, manage, and conserve migratory birds

Milestones:

December 2012	Pre-proposals due
March 2013	Full proposals due
March-May 2013	Project review and selection
June 2013	Grant contracts offered to successful projects
July-October 2013	Project implementation

Great Lakes Action Plan Measure of Progress:

This project will contribute to achievement of GLRI Action Plan Habitat and Wildlife Protection and Restoration Focus Area measures, including restoration of 700 acres of wetlands (Measure No. 6); restoration of 50 upland acres (Measure No. 7); improvement of water quality; and development of 12 cooperative and grant agreements with partners to achieve the fish and wildlife management goals of the Great Lakes States and Tribes for fish and wildlife and their habitats.

Contact: Mark Holey, (920) 866-1711, mark_holey@fws.gov; Brian Elkington, (612) 713-5168, brian_elkington@fws.gov

Title: Restoration of Lake Trout and Lake Sturgeon in the Great Lakes (Template No. 028)

Funding Amount: \$6,619,000

Authority for Work: Great Lakes Fish and Wildlife Restoration Act of 2006; Fish and Wildlife Coordination Act; Partners for Fish and Wildlife Act

Description of Work: The Service will undertake numerous lake trout restoration activities, including enhanced population assessment and modeling, to aid FWS offices in determining appropriate strains and stocking levels to achieve restoration of native lake trout in all five of the Great Lakes. This will include improvements and upgrades at FWS national fish hatcheries to produce additional lake trout needed to fully meet the agency's goals as established by lake trout rehabilitation plans and the US v. MI Consent Decree, and complementing the efforts of the Great Lakes Fisheries Commission's Sea Lamprey Control Program. Additionally, this project supports the rearing, stocking, and assessment of native lake sturgeon in priority Great Lakes tributaries throughout the basin, including assessment of the efficacy of stream-side propagation and stocking techniques as a means of re-establishing populations of lake sturgeon in their historic tributaries. Funding also supports the work of law enforcement in the pursuit of criminal investigations focused on illegal take of Great Lakes lake trout and lake sturgeon.

Milestones:

Conduct population and habitat assessments	April 2013- October 2013
Enhance stocking efforts	Ongoing (field season)
Modeling, propagation, stocking evaluations	Ongoing, March 2013 –
Infrastructure improvement work	Ongoing, March 2013 –
FWS Law Enforcement investigations	Ongoing, March 2013 –

Great Lakes Action Plan Measure of Progress:

The activities implemented with this funding will both directly and indirectly help to achieve self-sustaining aquatic populations in the Great Lakes. Many of the activities, such as stocking, are intended to directly link to improvements in populations and other activities, such as habitat restoration, will support the health and survivability of lake trout and lake sturgeon populations. This template will facilitate the Measure of Progress in Focus Area 4 = Habitat and Wildlife Protection and Restoration = “% of populations of native aquatic non-threatened and endangered species self-sustaining in the wild “(Measure No. 5).

Funding will result in the following accomplishments:

- Increased yearling lake trout production
- Propagation of lake sturgeon fingerlings into 4 priority watersheds
- Completion of fifteen tribal consultations
- Completion of fifteen population assessments
- Completion of twelve lake sturgeon assessments
- Completion of infrastructure improvements needed for additional lake trout yearling production

Formal agreements and or procedures facilitating our collaboration with partners: Great Lakes Fishery Commission, Lake Committees, Technical Committees, and fish community objectives.

Title: Great Lakes Basin Endangered Species Recovery Initiative (Template No. 2013-030)

Funding: \$600,000

Authority: Endangered Species Act of 1973, as amended

Work: Endangered species serve as a barometer to the health of the Great Lakes Ecosystem and the Service expects to provide \$600,000 through competitive grants or cooperative agreements to promote and enhance recovery of Endangered and Threatened species that occur in the Ecosystem. The Service will make funds available for projects through both a public request for proposals and existing Service cooperative agreements. We anticipate funding projects that entail direct species management, habitat management such as wetland restoration, improving hydrology of Great Lakes tributaries, reforesting habitats, reducing impacts of invasive species, and creating and/or improving corridors between habitats. These projects will be accomplished by connecting and leveraging input from current Federal and State programs, grassroots organizations, and local people. The Initiative will benefit priority listed species in the watershed, particularly the federally protected **piping plover**, a GLRI focal species identified in the GLRI Action Plan.

Milestones:

January 2013 Request for Proposals to Service field offices and posted to Grants.gov

March 2013 RFP closes

Apr/May 2013 Ranking and selection of projects

June 2013 Announcement of awards; initiation of field season-dependent actions

Great Lakes Action Plan Measures of Progress: Project implementation will directly map to 2 measures of progress in the Action Plan:

- 1) Number of species delisted (ESA) due to recovery
- 2) Percent of Recovery Actions implemented for priority listed species.

Proejects will advance Focus Area 4 - Habitat and Wildlife Protection and Restoration recovery goals for listed populations within the Great Lakes Basin. Specifically, FY 2013 GLRI funds for this project will target recovery actions that facilitate the delisting of the piping plover and the Pitcher's Thistle, and other imperiled Great Lakes species. Habitat protection, restoration, and enhancement goals will contribute to species recovery and will support the performance metric identified in the Action Plan: "Number of species delisted due to recovery".

Point of Contact: Lisa Mandell, lisa_mandell@fws.gov, (612) 713-5343

Title: Great Lakes Watershed Habitat and Species Restoration Initiative (Template No. 2012-031)

Funding: \$3,000,000

Authority: Great Lakes Fish and Wildlife Restoration Act of 2006; Fish and Wildlife Coordination Act; Partners for Fish and Wildlife Act; Endangered Species Act of 1973, as amended

Work: This project is a collaborative effort among the Service's National Fish Passage Program (FPP), Partners for Fish and Wildlife Program (PFW), Migratory Bird Joint Ventures in the Great Lakes Basin (JVs), Coastal Program - Great Lakes (Coastal) in coordination and collaboration with numerous stakeholders within the Great Lakes conservation community including States, local municipalities, private landowners, local watershed groups, NGOs, and other Federal agencies. Together, partners bring matching funds and contribute habitat protection and restoration expertise. We anticipate this project will generate 30 to 50 cooperative or landowner agreements annually with non-federal partners. We have worked with more than 300 partners to implement on-the-ground restoration projects within the Basin during the past several years and have a proven record of implementing cost-effective projects that have meaningful impacts on Great Lakes fish and wildlife resources and that are of great value to the American people.

Our approach to protecting and restoring priority fish and wildlife populations will include: removing fish passage barriers, stabilizing stream banks, improving in-stream habitat, and restoring and protecting wetland and upland areas of value to migratory birds, listed species, and other wildlife. Projects in all programs are specifically chosen based on known impediments to species survival, restoration of degraded habitats, and protection of key areas providing wildlife corridors. Coastal biologists are currently focusing their efforts on identifying limiting factors, such as habitat availability, and taking action to improve populations of key Great Lakes species, including lake sturgeon and piping plover. Joint Venture Coordinators are working with partners to target objectives in their Implementation Plans focused on priority bird species. Fish passage biologists are working on the landscape to identify and remove known impediments to movement of aquatic organisms. Partners for Fish and Wildlife biologists are working to restore degraded wetland and upland habitats for fish and wildlife. All four programs will work closely with partners to apply these priorities and other decision tools to identify watershed areas most in need of protection and restoration. These actions will reconnect aquatic and terrestrial habitats, reduce sediment and nutrient inputs, restore natural hydrologic regimes, improve water quality, and increase populations of lake sturgeon, brook trout, migratory birds, and threatened and endangered species within Great Lakes tributaries and associated habitats. Restoring and protecting key watersheds and tributaries will also strengthen resilience within the Great Lakes ecosystem to withstand future stressors, such as climate change.

About \$2.5M will be awarded through grants, contracts and cooperative agreements to partners. The Service's Requests for Proposals announcements and/or project review processes will emphasize efforts within Areas of Concern or that would reduce excessive phosphorus inputs into a watershed, in recognition of the Interagency Task Force's priority on Areas of Concern and phosphorus reduction.

Milestones:

February – March 2013	Project identification
April 2013 – Sept 2014	Project implementation
September – October 2012	Fish Passage Program RFP

Ongoing	Coastal Program project submittal and review (proposals accepted year-round)
January 2013	Joint Venture Program RFP
Ongoing	Partners for Fish and Wildlife project submittal and selection

Great Lakes Action Plan Measure of Progress:

This project will contribute to achieving a number of GLRI Action Plan measures identified in Focus Area 4 - Habitat and Wildlife Protection and Restoration, including:

Miles of rivers reopened for fish passage (Measure No. 1): 151 stream miles opened to fish passage (FPP)

Number of fish passage barriers removed or bypassed (Measure No. 2): 18 fish passage barriers removed (FPP)

Number of acres of wetlands protected, restored, and enhanced (Measure No. 6): 225 (PFW); 200 acres (JV); 75 (Coastal)

Number of acres of wetland-associated uplands protected, restored, and enhanced (Measure No. 6): 225 (PFW); 100 (JV); 25 (Coastal)

Contacts: Aaron Woldt, aaron_woldt@fws.gov, (612) 713-5110 (Fish Passage Program); Barbara Pardo, barbara_pardo@fws.gov, (612) 713-5433 (Joint Venture Program); Lori Nordstrom, lori_nordstrom@fws.gov, (612) 713-5475 (Partners for Fish and Wildlife Program); Christie Deloria, christie_deloria@fws.gov, (906) 226-1240 (Coastal Program)

Title: Conservation of Great Lakes Islands and Coasts (Template No. 2012-032)

Funding: \$400,000

Authority: Fish and Wildlife Coordination Act

Work: Great lakes islands form the world's largest freshwater island system and are a unique natural resource. Islands provide habitats for rare and threatened and endangered species, serve as colonial bird nesting sites, and are important stopover sites for migratory birds. Additional inventory work is needed to identify island locations where these species and associated resources occur and are in most need of protection. The Service will use project funds to deploy its medium format digital camera system and aircraft to conduct land cover mapping, locate colonial water bird nest sites, and target islands for in-depth resource inventory of vegetation and wildlife. Results of this study, which will include land cover maps and associated resource information, will be used, in cooperation with other efforts, to prioritize islands for acquisition and to develop management plans for islands.

Another component of this project is acquisition of islands and/or coastal tracts by the Service to provide permanent protection and conservation of the previously described wildlife and habitat resources. The Service currently owns 20 islands in Lakes Michigan, Huron, Superior, and Erie as part of the National Wildlife Refuge (NWR) System. Currently one island tract (Charity Island) and multiple coastal tracts (ranging in size from 14 to 70 acres) are being evaluated for acquisition (total acres conserved will vary with appraised land values).

The final component of this project is restoration of coastal habitats at Shiawassee NWR and Ottawa NWR. The Service has identified restoration projects that would include water quality improvement, improving/reconnecting natural hydrology to Turtle Creek (70 acres), Toussaint River (171 acres), and Lake Erie, and improving coastal wetland, forest, and wet meadow habitats adjacent to the Toussaint River and Turtle Creek (specific projects would be undertaken only if land acquisition efforts are unsuccessful).

Milestones:

Spring and summer 2013	Flights for water bird and vegetation monitoring
Late summer to fall 2013	Data analysis and summary
September 2013	Complete property acquisition

Great Lakes Action Plan Measure of Progress: Activities conducted under this template will contribute to overall achievement of several GLRI Action Plan measures identified in Focus Area 4 - Habitat and Wildlife Protection and Restoration, including: number of acres of wetlands and wetland-associated uplands protected, restored, and enhanced (Measure No. 6) and number of acres of coastal, uplands, and island habitats wetlands and wetland-associated uplands protected, restored, and enhanced (Measure No. 7) – 241 acres targeted, see above.

Contact: Matt Sprenger, matt_sprenger@fws.gov, (612) 713-5327

Title: Upper Midwest and Great Lakes Landscape Conservation Cooperative (UMGL LCC)
(Template No. 2012-034)

Funding: \$500,000

Authority: Multiple authorities, including, Great Lakes Fish and Wildlife Restoration Act of 2006; Fish and Wildlife Coordination Act; Partners for Fish and Wildlife Act; Endangered Species Act of 1973, as amended; Migratory Bird Treaty Act; and others

Work: The UMGL LCC, with both U.S. and Canadian participants, will identify conservation needs common to all organizations and identify and produce tools and products that help inform decision making and on-the-ground action taken by individual organizations. Of greatest importance across the basin are anticipated impacts of climate change, but there are many others, e.g., energy development and habitat fragmentation. Overall, the LCC will assist habitat-based programs functioning as a science nexus to synthesize data, apply biological models, and develop decision support tools to better guide on-the-ground conservation efforts. All work is directed by a Steering Committee made up of executive leaders of the conservation community. In FY2013, this project expects to provide approximately \$480,000 to continue and initiate new projects selected by the conservation community to assist targeted, on the ground conservation. Project work will include, but not be limited to the following:

- Develop Fish Trophic Interaction Indicators of Climate Change for the Great Lakes
- Reestablish ecological connectivity between the Great lakes and their tributaries

The UMGL LCC serves as a venue for the conservation community. Currently, participants include 9 States, 2 provinces, 9 Federal agencies, and multiple nongovernmental organizations, partnerships, and commissions. See www.GreatLakesLCC.org for full information on work products.

Milestones: October 2012 – January 2013 Project selection
January 2013 - ongoing Project implementation

The LCC will provide technical and scientific support to all members of the conservation community remains the fundamental purpose as State and Federal agencies, along with other critical organizations, join together to decide exactly what tools are needed to better design and execute our shared conservation priorities. In essence, each effort helps identify the most-needed actions in the highest priority areas, which increases the overall quality of projects identified and funded through the GLRI and other sources. The results of efforts of the LCC will improve the success of conservation actions planned and implemented by all stakeholders and lead to greater cost-effectiveness. The LCC projects directly address recommendations of the Science Advisory Board.

Specifically, the ecological connectivity project will provide specific guidance for restoration at individual watershed and basin-wide scales, refine methodologies for spatial analysis of barriers, and provide a systematic framework for comparing costs (direct economic costs, species invasions) and benefits (connectivity, focal fish species) of barrier removal.

Great Lakes Action Plan Measure of Progress: Although this work does not directly map to one performance metric tracked in the GLRI Action Plan for the Habitat and Wildlife Protection and Restoration Focus Area, this work supports all measures within the focus area, specifically providing critical information to protect the habitats in the great lakes that are most important for maintaining healthy fish and wildlife populations. The LCC will implement projects that directly

respond to the Action Plan Principal Actions to: *Improve Aquatic Ecosystem Resiliency, Improve Populations of Native Species, and Identify and Track Progress on Great Lakes Habitats*. Projects will facilitate progress toward 2014 objectives to 1) protect, restore or enhance wetlands, wetland associated uplands, and high priority coastal, upland, urban and island habitats, and 2) to improve aquatic connectivity in the basin.

Contacts: Craig Czarnecki, craig_czarnecki@fws.gov, (517) 351-8470; Brad Potter, bradly_potter@fws.gov, (517) 351-4213

Title: Great Lakes Wind Power: Making it Migratory Bird and Bat-friendly (Template No. 2012-036)

Funding: \$500,000

Authority: Migratory Bird Treaty Act; Bald and Golden Eagle Protection Act; Great Lakes Fish and Wildlife Restoration Act of 2006; Fish and Wildlife Coordination Act; Endangered Species Act of 1973, as amended.

Work: The shorelines of the Great Lakes provide excellent wind resources for wind development as do the waters and islands of the Great Lakes. However, the shorelines and pelagic areas are also major migration routes for many bird and bat species. Conservation and management agencies need better information regarding shoreline migration corridors, utilization of Great Lakes islands by migrants and breeding birds, and migration and use over open water (pelagic) areas.

The purpose of this project is to identify areas where wind energy could be developed safely and areas where it is likely to have serious adverse impacts on birds and/or bats. The knowledge gained would also be useful for identifying important areas and habitats for migrating birds and/or bats that are adversely affected by other types of development. It would help to identify key areas throughout the Great Lakes that are critical to the many bird and bat species that migrate across and around the Great Lakes. This project addresses issues raised in the Upper Mississippi Valley/Great Lakes Water Bird Conservation Plan and Upper Mississippi River and Great Lakes Joint Venture Implementation Plan.

Information from this project will guide decision-makers in siting and operating wind power facilities in a way that minimizes the likelihood of bird and/or bat collisions with wind turbines and associated structures. For shoreline surveys, avian marine radar coupled with acoustic/ultrasonic monitors will be utilized to survey avian and bat migration for approximately a three-mile distance inland from Great Lakes shorelines. Data obtained from the surveys will be analyzed and incorporated into a spatial model to predict areas of relatively high and low risk for birds and/or bats, relative to wind power development. These data will be shared with State departments of natural resources, State Power Siting Authorities, Federal regulatory agencies (such as the Corps of Engineers), Great Lakes Wind Collaborative, and other partners to aid in siting wind power projects to protect migratory birds. Specifically, meetings will begin to be scheduled with State DNRs and regulatory agencies in 2012 to share preliminary results to facilitate environmentally sustainable project siting. Preliminary data from the study is already being used internally by the Service and shared with some state DNRs to assist in deciding safe operating regimes of wind facilities for the Federally listed Indiana bat (*Myotis sodalis*) and is being used to help justify some of the “no coverage” areas of the Regional Wind HCP. Finally, data from the studies will identify areas where further analysis is necessary to ensure that wind power is developed in a manner protective of migratory birds and bats.

This project addresses migratory birds and bats migrating or moving through the Great Lakes Basin at the population (continental) scale. Although the state of the science does not allow establishment of a direct relationship between population level effects of avoidance of impacts to migratory birds and bats at individual wind projects, this GLRI-funded project is significant nonetheless as it is the *only* basin-wide, multi-faceted project identifying sensitive areas for migratory birds and bats to help inform wind power project siting decision-making.

Milestones:

FY 2013	Continue data analysis
November 2012	End fall survey
November 2012	Presentation and two posters at National Wind

	Coordinating Collaborative Research Meeting IX
Winter 2012	Complete check-up and calibration of two radar units at factory
Winter 2012	Receive reports from 5 grants (2010 funds)
March 2013	Begin spring survey
June 2013	End spring survey, surveys will have been conducted on 4 of 5 Great Lakes

Measure of Progress: Although this template does not directly map to a performance metric tracked in the GLRI Action Plan for the Habitat and Wildlife Protection and Restoration Focus Area, this work will provide critical information to protect bird and bat habitats in the great lakes that are most important. This effort directly responds to the Action Plan Principal Actions to: *Improve Populations of Native Species, and Identify and Track Progress on Great Lakes Habitats*. Projects will facilitate progress toward the 2014 objective to 1) protect, restore or enhance wetlands, wetland associated uplands, and high priority coastal, upland, urban and island habitats.

The ultimate intent of this project is to identify buffer zones along the landward side of the Great Lakes. We will identify areas as migration corridors and/or concentration areas that should be avoided for wind development or where additional studies and special operational restrictions will probably be necessary. Based upon the U.S. shoreline of the Great Lakes, and depending upon the appropriate width of the buffer zones, it is reasonable that we will identify between 5,000 and 25,000 square miles of shoreline for protection in the Great Lakes.

As stated above, preliminary data from the study is already being used internally by the Service and shared with some state DNRs to assist in deciding safe operating regimes of wind facilities for the Federally listed Indiana bat (*Myotis sodalis*) and is being used to help justify some of the "no coverage" areas of the Regional Wind HCP.

Contact: Jeff Gosse, jeff_gosse@fws.gov, (612) 713- 5138

Title: Great Lakes Basin Fish Habitat Partnership (Template No. 2012-037)

Funding: \$400,000

Authority: Great Lakes Fish and Wildlife Restoration Act of 2006; Fish and Wildlife Coordination Act

Work: The Great Lakes Basin Fish Habitat Partnership (Partnership) is a recognized partnership under the National Fish Habitat Action Plan. Work is focused on restoring fish habitats and ecosystem functions that will sustain and restore fishery populations in the Great Lakes Basin. The Partnership is addressing population declines and habitat loss through watershed restoration activities. Primary actions the Partnership will undertake restore and protect fish habitat across the Great Lakes Basin. The Service coordinates the Partnership's activities and projects.

The Partnership will provide funding for on-the-ground habitat restoration, which will include: restoration of large woody debris in floodplains and streams; removal of dams; replacement of barrier culverts; stormwater management improvement; restoration of wetlands that slow overland flow; restoration and protection of spawning and nursery habitats; and, restoration of forested edges in riparian areas. Most of this work will be done cooperatively with local, State, tribal and other partners who will receive funding through grants or cooperative agreements. These partners contribute matching funds, expertise, and in-kind support for projects.

The Partnership will utilize the basin-wide fish habitat assessment it completed in 2012 to select the most effective projects in the geographic locations of greatest need. The Partnership will also work cooperatively with the Upper Midwest-Great Lakes Landscape Conservation Cooperative to identify priority areas and projects that meet Partnership goals and adapt to climate change.

Milestones:

September 2012	Request for Proposals (already released)
May 2013	Projects selected and approved
September 2013	Cooperative Agreements signed
March 2016	Projects Completed

Great Lakes Action Plan Measure of Progress:

This project contributes to achievement of a number of GLRI Action Plan measures in Focus Area 4 - Habitat and Wildlife Protection and Restoration, depending upon projects selected for funding. Specifically, this project will contribute:

- 10 miles of rivers reopened for fish passage and 2 miles of stream with restored ecological function (Measure No. 1)
- 3-5 fish passage barriers will be removed or bypassed (Measure No. 2)
- 100 acres of wetlands and wetland-associated uplands protected, restored, and enhance (Measure No. 6); and others.

Contact: Mark Brouder, mark_brouder@fws.gov, (715) 682-6185

Title: *Sustain Our Great Lakes* Grant Program - Habitat (Template 2012-155)

Funding: \$3,138,000

Authority: Clean Water Act Section 118

Work: The *Sustain Our Great Lakes* (Habitat) Program supports habitat restoration and enhancement projects that help improve ecological condition of the Great Lakes Basin. Projects will further the goals of the GLRI and goals of States, Tribes, municipalities, non-governmental organizations, and universities. The *Sustain Our Great Lakes* Program is a public-private partnership among ArcelorMittal, National Oceanic and Atmospheric Administration, National Fish and Wildlife Foundation (overall program coordinator), Natural Resources Conservation Service, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, and U.S. Forest Service.

The *Sustain Our Great Lakes* Program supports habitat restoration and enhancement in the Great Lakes basin by awarding competitive grants for on-the-ground projects. Eligible applicants include: non-profit 501(c) organizations; State, tribal and local governments; and educational institutions. To be eligible for grant funding, projects must 1) occur within the Great Lakes Basin and 2) direct the majority of grant funding toward on-the-ground habitat restoration. Funding is not provided for land protection, i.e., acquisition and easement, rain barrels, rain gardens, green roofs, or research. Projects that seek funding for political advocacy, lobbying, litigation, fundraising, or legally mandated mitigation projects are not eligible.

Grant funding is directed toward projects that improve the quality and connectivity of stream, wetland and coastal habitat through the following four action categories:

- Restoration of aquatic connectivity
- Stream and riparian habitat restoration
- Wetland restoration
- Near-shore/shoreline habitat restoration

Within those four priority action categories, preference will be given to projects that 1) benefit species of conservation concern; 2) accelerate BUI delisting within AOCs; 3) implement control of aquatic invasive species; 4) reduce phosphorus inputs to lakes and streams; and 5) provide technical assistance to private landowners. The most-competitive proposals will demonstrate:

- Close alignment with funding priorities
- Clear definition of activities and anticipated ecological results
- Strong technical merit
- Competitive project costs
- Experienced project teams and partner engagement
- Plans for pre- and post-implementation monitoring to document habitat improvements and other project outcomes

A panel of State, tribal and provincial reviewers and the *Sustain Our Great Lakes* advisory team will use these criteria as a strong basis for project selection; however, project selections will also be based on other considerations, such as availability of funding, geographic balance, and balance among project types. In addition, selections may be based on how activities advance goals of established watershed, regional, tribal, State, Federal, and provincial conservation plans.

After project selection, National Fish and Wildlife Foundation staff will work with applicants to prepare grant agreements and other necessary paperwork, all of which will be completed

electronically using the Easygrants system. Additional information about the grantee's organization and its finances may be solicited during this time. Preparation of grant agreements will require approximately 4 to 8 weeks after the National Fish and Wildlife Foundation receives the additional required information from the grantee. Once grant agreements are finalized, funds will be advanced to qualified grantees based on cash needs of the project; some awards may be made on a reimbursable basis. Grantees will be required to submit interim and final financial and programmatic reports.

Grantees must document compliance with the National Environmental Policy Act, Endangered Species Act, National Historic Preservation Act, and any other relevant Federal, State, and local regulations. If a project involves substantial environmental data collection/generation, the grantee may be asked to develop a Quality Assurance Project Plan, per the advisement of the National Fish and Wildlife Foundation and the FWS.

Additional information on the *Sustain Our Great Lakes* Grant Program and partners may be found at the following links:

- *Sustain Our Great Lakes* Grant Program: www.sustainourgreatlakes.org
- ArcelorMittal: www.arcelormittal.com/usacr
- National Fish and Wildlife Foundation: www.nfwf.org
- National Oceanic and Atmospheric Administration: www.glerl.noaa.gov
- Natural Resources Conservation Service: www.nrcs.usda.gov
- U.S. Environmental Protection Agency: www.epa.gov/glnpo/fund/glf.html
- U.S. Fish and Wildlife Service: www.fws.gov/midwest/greatlakes/glcoastal.htm
- U.S. Forest Service: www.fs.fed.us

This template also supports the Service's liaison position shared with GLNPO (\$75,000). Located at GLNPO's office in Chicago, Illinois, this position engages in a variety of primary and general duties (attached) that support shared priorities of both the Service and GLNPO and add value to both agencies' activities, including the following: support efforts of the Service and GLNPO to coordinate, plan, budget, implement, and communicate aspects of the Great Lakes Restoration Initiative related to Federal trust fish and wildlife resources and their habitats; assist in identifying targets and actions to address and restore beneficial use impairments of fish and wildlife species, populations, and habitats in AOCs that will contribute to their delisting; assist in coordinating Service engagement in the review and potential re-writing of the Great Lakes Water Quality Agreement; and, provide organizational support to the State of the Lakes Ecosystem Conference (SOLEC) and facilitate execution of conference reporting.

Authorities for this position include the Great Lakes Fish and Wildlife Restoration Act of 2006, Fish and Wildlife Coordination Act, Clean Water Act, and Endangered Species Act.

Milestones:

February - June 2013	Project review and selection (pre-proposal stage included)
July-Aug 2013	Anticipated announcement of awards
July – September 2013	Grant agreements developed and regulatory compliance documented
September 2013	Initiation of project implementation

Great Lakes Action Plan Measure of Progress:

Individual projects have not yet been selected for funding, so specific anticipated outputs are not yet known. However, based on work supported through previous funding cycles, it is estimated that this new Habitat funding will contribute to the following GLRI Action Plan measures for Focus Area 4 - Habitat and Wildlife Protection and Restoration:

- Miles of rivers reopened for fish passage: 100
- Number of fish passage barriers removed or bypassed: 20
- Acres of wetlands and wetland-associated uplands protected, restored and enhanced: 500
- Acres of coastal, upland and island habitats protected, restored and enhanced: 500

Contributions of this grant program to Action Plan Measures of Progress will be aggregated with those from the *Sustain Our Great Lakes* Grant Program – Areas of Concern (Template 2012-155).

The Service will serve as an intermediary of funds to the National Fish and Wildlife Foundation.

Point of Contact: Amy McGovern, 312-886-1474, amy_mcgovern@fws.gov

Title: *Sustain Our Great Lakes* Grant Program – Areas of Concern (Template 2012-157)

Funding: \$5,236,000

Authority: Clean Water Act, Section 118

Work: The *Sustain Our Great Lakes* Areas of Concern Program supports habitat restoration and enhancement projects that accelerated the delisting of BUIs within AOCs. Projects will further the goals of the GLRI and goals of States, tribes, municipalities, non-governmental organizations, and universities. The *Sustain Our Great Lakes* Program is a public-private partnership among ArcelorMittal, National Oceanic and Atmospheric Administration, National Fish and Wildlife Foundation (coordinator), Natural Resources Conservation Service, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, and U.S. Forest Service.

This sub-grant program will meet criteria described for the *Sustain Our Great Lakes* Habitat grant program (described previously). To be eligible for consideration for this AOC sub-grant program, projects must contribute progress toward delisting of BUIs within U.S. AOCs. Preference will be given to projects identified as priorities in Stage 2 Remedial Action Plans (RAP). To this end, grant applicants at the full proposal stage will be required to submit a letter of support from the local RAP implementation group, defined as the State agency responsible for implementing the AOC program or the local public stakeholder group working with the state agency on implementing the RAP, identifying whether the proposed project is needed to achieve AOC delisting.

Milestones:

February - June 2013	Project review and selection (pre-proposal stage included)
July 2013	Anticipated announcement of awards
July – September 2013	Grant agreements developed and regulatory compliance documented
September 2013	Initiation of project implementation

Great Lakes Action Plan Measure of Progress:

Individual projects have not yet been selected for funding, so specific anticipated outputs are not yet known. However, based on work supported through previous funding cycles, it is estimated that this funding will contribute to the following GLRI Action Plan measures

- Number of BUI delisting project starts in Areas of Concern: 8

Contributions of this grant program to Action Plan Measures of Progress will be aggregated with those from the *Sustain Our Great Lakes* Grant Program - Habitat (Template 2012-155).

The Service will serve as an intermediary of funds to the National Fish and Wildlife Foundation.

Point of Contact: Amy McGovern, amy_mcgovern@fws.gov, (312) 886-1474

Title: State and Tribal Aquatic Nuisance Species Management (Template No. 2013-189)

Funding: \$5,353,039

Authority: Nonindigenous Aquatic Nuisance Prevention and Control Act, as amended

Work: This project supports approved (by Aquatic Nuisance Species Task Force) State and Interstate Aquatic Nuisance Species Management Plans, enhancement of state planning for rapid response actions, and implementation of actual rapid response actions or mock rapid response exercises by States. (This project does not include Asian Carp Framework support for Illinois Department of Natural Resources to implement Asian carp-related activities under their State Aquatic Nuisance Species Management Plan. Approximately \$300K of this template amount will be granted to BIA by FWS to support Great Lakes Tribes in the development and implementation of Tribal AIS Plans. This process is different than that implemented in FY2011 and FY12 to support grants to Tribal entities, where BIA received these funds from EPA through their IA.)

Milestones: All grants agreements will be delivered to the States, for approval and signature by, August 31, 2013.

Great Lakes Action Plan Measure of Progress:

The Service will support on-the-water implementation of the eight Great Lake State Aquatic Nuisance Species Management Plans approved (by Aquatic Nuisance Species Task Force). This project will directly support achievement of several Invasive Species Focus Area measures, including: the rate of nonnative species newly detected in the Great Lakes ecosystem (Measure No. 1); more than 500 acres managed for populations of invasive species controlled to target level (Measure No. 2); and, number of recreation and resource users contacted on best practices that prevent the introduction and spread of invasive species (Measure No. 3).

The States and Tribes are best positioned to help reduce the rate of introductions of aquatic invasive species into the Great Lakes, and to control and contain aquatic invasive species established there. The State of Illinois has been a leader in efforts to protect the Great Lakes from invasion of Asian carps via the Chicago Area Waterways System.

Contact: Mike Hoff, michael_hoff@fws.gov, (612) 713-5114

Title: Mass Marking of Great Lakes Trout and Salmon (Template No. 2012-305)

Funding: \$1,500,000

Authority: Great Lakes Fish and Wildlife Restoration Act of 2006; Fish and Wildlife Act of 1956; Fish and Wildlife Coordination Act; Great Lakes Fishery Act of 1956.

Work: This project will result in the tagging of 4.5 million lake trout and 4.3 million Chinook salmon stocked into Lakes Michigan and Huron, and will provide assistance to the Service's Region 5 (lower Great Lakes) to tag 1.0 million lake trout in Lakes Ontario and Erie. This project will also assist states in tag recovery in Lakes Michigan and Huron. Through this project, the Service will fund projects that develop and implement, with state and tribal partners, experimental designs that tag specific lots Chinook salmon and lake trout to evaluate their movements, relative survival, and other population demographics needed to manage predator demand, measure rates of natural reproduction, and manage harvest on populations under rehabilitation.

Marking all trout and salmon stocked into the Great Lakes will provide critical information on the Lakes' fish communities, i.e., contributions of stocked and wild (those without tags) trout and salmon, required by Federal, State, and tribal fishery managers to achieve balance between predators and prey, achieve native species restoration, control invasive non-native alewives, and maintain the estimated annual \$7 billion economic benefit from Great Lakes fisheries to the American people.

The Service's Great Lakes Mass Marking Laboratory ultimately seeks to implant coded-wire-tags in and adipose fin-clip all 25 million trout and salmon stocked annually into the U.S. Great Lakes, assist in recovery of tagged fish caught by sport and commercial fishers, manage a basin-wide database of stocking and recapture records, and provide data analyses. Full program implementation of the mass marking program will require an additional \$4.9 million to complete equipment purchases and an annual operational budget of \$5.9 million.

Milestones:

October 2011 - May 2013	Order tags and other equipment
February - April 2013	Recruit temporary staff
March - April 2013	Tag Chinook salmon at 8 state hatcheries in MI, WI, IL, IN
May - September 2013	Process tag recoveries
July - September 2013	Tag lake trout at 3 federal hatcheries and one state hatchery
April - September 2013	Recover tagged fish in IL, MI, IN, WI

Great Lakes Action Plan Measure of Progress:

The comprehensive program implemented with this funding will provide critical information to assess the progress toward achieving self-sustaining lake trout populations in the Great Lakes, and indirectly maps to the Habitat and Wildlife Protection and Restoration Focus Area metric, "% of populations of native aquatic non-threatened and endangered species self-sustaining in the wild" (Measure No. 5). Mass marking will lead to management decisions and actions that will increase the percentage of native non-threatened and endangered species that are self-sustaining in the wild.

Points of Contact: Charles Bronte, charles_bronte@fws.gov, (920) 866-1761

Title: Lakewide Management Plan (LaMP) Coordination and Implementation (Template No. 2013-331)

Funding: \$150,000

Authority: Great Lakes Fish and Wildlife Restoration Act of 2006; Fish and Wildlife Coordination Act

Work: The Service's expertise, capacity, and support for the Great Lakes Lakewide Programs will be focused on implementation of LaMPs and their associated goals, objectives, and targets for Lakes Superior, Michigan, Huron, Erie and Ontario. This work will include participation in LaMP processes, programs, conferences, workshops, and projects, including development of LaMP documents and updates. Specifically, Service staff will participate in and serve on workgroups and technical committees, including attending meetings and workshops. The Service will also participate in management-level meetings and committees. In addition, the Service will undertake and participate in interagency actions that implement LaMP programs and priorities, including helping to incorporate LaMP goals into Service planning efforts. Funding will be used to support the following LaMP-specific efforts:

- Lake Superior Lakewide Management Plan- support continued leadership as co-chair of the Aquatic Community Committee of the Superior Work Group and data synthesis, analysis, and reporting from CSMI activities
- Lake Michigan Lakewide Management Plan - support (1) term biologist hired to coordinate and implement high-priority LaMP actions
- Lake Erie Lakewide Management Plan - support (1) Lower Lakes term biologist to coordinate and implement high-priority LaMP actions
- Lake Ontario Lakewide Management Plan – *see Lake Erie*

Milestones:

Ongoing	Implementation of priority LaMP actions
Ongoing	Participation in LaMP meetings and events

Great Lakes Action Plan Measure of Progress: The project will contribute to achievement of 5 priority LaMP projects in FY2013: Focus Area 5 – Accountability, Education, monitoring, Evaluation, Communication and Partnerships. Project outputs will indirectly support and contribute to achievement of a variety of measures in other GLRI Focus Areas, as well.

Contact: Mark Brouder, mark_brouder@fws.gov, (715) 682-6185 (Lake Superior); Mark Holey, mark_holey@fws.gov, (920) 866-1760 (Lake Michigan); Kofi Fynn-Aikens, kofi_fynnaikins@fws.gov, (716) 691-5456 (Lakes Erie and Ontario)

Title: Asian Carp Framework Projects - USFWS (Template No. 2013-671)

Funding: \$2,630,000

Authority: Nonindigenous Aquatic Nuisance Prevention and Control Act, as amended

Work: The Service and partners will implement the *2013 Asian Carp Control Strategy Framework* (<http://asiancarp.us/documents/2013Framework.pdf>)

Framework Section	Project Title	Project Description	Amount
1.1	USFWS Monitoring and Rapid Response Team Support in CAWS	Development and support of ACRCC's MRRP, support of Incident Command System (ICS) as needed, provision of staff, equipment, supplies, and ICS team members as needed, attainment of goals and objectives of the MRRP.	520,000
3.1	Support for Asian Carp Rapid Response in the Great Lakes Basin	Satisfaction of needs of USFWS partners in addressing rapid response actions around the Great Lakes basin.	700,000
3.1	USFWS Great Lakes Asian Carp Monitoring Program	Ongoing early detection, rapid assessment, risk assessment, rapid response program for the Great Lakes, information that will build upon existing knowledge of spawning/recruitment requirements for bighead and silver carp.	150,000
5	USFWS Fisheries Program Capacity for eDNA sampling and early detection	USFWS conservation offices conducting eDNA sampling in areas of concern, with emphasis on southern Lake Michigan, western Lake Erie, and other potential invasion hotspots.	300,000
5	USFWS Fisheries Program Capacity for eDNA processing.	USFWS assumes lead in eDNA sample analysis for the CAWS, and processes 120 samples per week at La Crosse Fish Health Center.	500,000
6.1	Increased Lacey Act Enforcement of Illegal Transport of Injurious Wildlife	Specifics are considered law enforcement sensitive.	400,000
6.1	eDNA Educational Video	Final eDNA video released Summer of 2013	10,000
6.1	Increased Web Outreach	AsianCarp.us will continue to be the ACRCC's central platform for public outreach and education reaching over 2,000 people a month from over 80 countries. In FY 2013 the Service will continue in its role as site administrator and seek to expand the website's use of multimedia, particularly video.	50,000

Milestones:

See Action Items, above

Great Lakes Action Plan Measure of Progress: This template directly maps to GLRI Action Plan Invasive Species Focus Area performance metrics for: number of multi-agency plans established..., and number of acres managed for population of invasive species. The Asian Carp Framework Actions, coordinated and implemented with partners, directly responds to the Action

Plan Principal Actions to: *Address water pathways vectors, Prevent through Outreach and Education, Develop innovative control technology, Support States' Role in Prevention and Control, Control Key invasive species, and Establish early detection and rapid response capability.* Projects will facilitate progress toward the 2014 Goal 4 objective to develop and implement a “comprehensive program for detection and tracking newly identified invasive species in the Great Lakes is developed and provides up-to-date critical information needed by decision makers for evaluating potential rapid response actions.”

Actions directly support long-term invasive species Goal 5 identified in the Action Plan: “An effective, efficient and environmentally sound program of integrated pest management for invasive species is developed and implemented, including program functions of containment, eradication, control and mitigation.”

Enhanced monitoring under this template will contribute information to assess the metric: “Number of nonnative species newly detected in the Great Lakes ecosystem.”

The program addresses one of nine priorities of the Council of Great Lakes Governors. The program also supports State and Interstate Management Aquatic Nuisance Species Plans, which are approved for each State by the Aquatic Nuisance Species Task Force.

Contact: Aaron Woldt, aaron_woldt@fws.gov, (612) 713-5110, Michael Hoff, Michael_Hoff@fws.gov, (612) 713-5114, Chuck Traxler, Charles_Traxler@fws.gov – Website contact.

Title: Asian Carp Framework Projects – State DNRs (Template No. 2013-672)

Funding: \$5,210,000

Authority: Nonindigenous Aquatic Nuisance Prevention and Control Act, as amended

Work: The USFWS will direct funding through the existing cooperative agreement with the Great Lakes States for implementation of the *2013 Asian Carp Control Strategy Framework* (<http://asiancarp.us/documents/2013Framework.pdf>)

Framework Section	Project Title	Lead Agency	Project Description	Amount
1.1	Enhanced Monitoring Above and Below Electric Barriers in CAWS	IL DNR	Prevention of establishment in CAWS through an active and adaptive monitoring and management program. Coordination and summary of sampling and response efforts. Working with USFWS and others we will provide a scientific evaluation of our efforts with population level analysis based upon 2 years of effort.	1,600,000
1.2	Contract Fishing for Asian Carp Removal	IL DNR	Ability to assess these populations and adjust efforts to optimize impacts, population reduction, continue contracted fishing with similar schedule to summer fishing (2x per month) over Dec, Jan, and Feb.	1,200,000
1.2	Illinois River Stock Assessment/	IL DNR	Prediction of effects of harvest and other control efforts on movement of Asian carp populations toward the Great Lakes, determination of potential impact of Asian carp on native fish and other ecosystem parameters if the carp invades the Great Lakes.	400,000
3.1	Strategies for Containment in Early Detection	OH DNR	New technology has been developed to allow for a portable electric weir that is safe and effective at containing fish in an area or guiding fish to a specific location. We propose the purchase of one of these systems designed for flexible deployment as needed in the event of an early detection. The technology can be used as a short term tool to contain suspected fish in an area where chances of capturing them can be increased.	200,000
4.1	Development of mobile electric barrier (This is the SuperShocker)	IL DNR	Tool that can be deployed rapidly for responses/containment to determine risk of fish in an area. Having a deployable gear which can act as a temporary barrier anyplace in the canal or other water body without fouling or clogging from debris in the water.	1,000,000
4.1	Develop Alternate Traps/Technologies to Enhance Asian Carp Capture Rates	IL DNR	Additional tools for stopping and eliminating Asian carp from the waterway. Additional barriers may add to or be more successful in control efforts for various life stages. Further development of new gears and fine tuning of existing ones to maximize detection and removal of Asian carp, additional tools for stopping and eliminating Asian carp from the waterway, additional tools to be utilized wherever Asian carp exist to increase likelihood of capture, additional tools for rapid	200,000

			responses which can be deployed to maximize chances of capturing rare fish in deep channels or Great Lakes habitats, develop tools that will be able to fish water more effectively and cost effective while minimizing mortality to native species.	
4.1	Field deployment of Carbon Dioxide Barrier to Deter Asian Carp	IL DNR, Univ. of Illinois, UMESC, USACE, USGS	The overall goal of this project is to quantify the effectiveness and feasibility of using CO2 gas as a novel Asian carp deterrent using ecologically-relevant scales in real-world scenarios. For this, the ecologically-relevant scale to be used would be an actual, full scale deployment on a waterbody currently used for commercial shipping, likely using a lock chamber. A full-scale CO2 barrier at a location such as this would be developed, implemented and tested. Quantification of barrier effectiveness would be carried out through the use of a telemetry array or remote monitoring (sonar, side-scan technology, etc.) of fishes currently residing downstream of the lock chamber. In addition, collaborations with agencies such as USACE, IL EPA, USGS and others would begin to quantify the impacts of target CO2 concentrations on non-target organisms, as well as existing infrastructure.	300,000
6.1	Community Action Initiatives to Increase Awareness, Surveillance, and Enforcement of Unlawful Live Asian Carp	IL DNR	Develop outreach and interpretive materials for businesses and consumers for awareness, increase enforcement and establish expectations regarding live fish sales in Illinois, increase coordination with multijurisdictional and regional fish hauling and movement of fish, increased awareness and education by December 2012 and then built upon in 2013 to ensure compliance, decrease or eliminate any illicit transportation of Asian carps within or across Illinois, educate law enforcement that is not regularly involved with resource conservation in the Asian carp issues and further increase ability to stop illicit ANS movement and enforce regulations.	300,000
6.1	Reducing the Bait Vector Risk	MI DNR	Production of signs for all GL states. A reduction in risk of bait transfer as a potential vector for Asian carp and active involvement by anglers to ensure that Asian carp don't invade the GLs.	10,000

Milestones:

See Action Items, above

Great Lakes Action Plan Measure of Progress: This template directly maps to GLRI Action Plan Invasive Species Focus Area performance metrics for: number of multi-agency plans established..., and number of acres managed for population of invasive species. The Asian Carp Framework Actions, coordinated and implemented with partners, directly responds to the Action Plan Principal Actions to: *Address water pathways vectors, Prevent through Outreach and Education, Develop innovative control technology, Support States' Role in Prevention and Control, Control Key invasive species, and Establish early detection and rapid response capability.* Projects will facilitate progress toward the 2014 Goal 4 objective to develop and implement a "comprehensive program for detection and tracking newly identified invasive

species in the Great Lakes is developed and provides up-to-date critical information needed by decision makers for evaluating potential rapid response actions.”

Actions directly support long-term invasive species Goal 5 identified in the Action Plan: “An effective, efficient and environmentally sound program of integrated pest management for invasive species is developed and implemented, including program functions of containment, eradication, control and mitigation.”

Enhanced monitoring under this template will contribute information to assess the metric: “Number of nonnative species newly detected in the Great Lakes ecosystem.”

The program addresses one of nine priorities of the Council of Great Lakes Governors. The program also supports State and Interstate Management Aquatic Nuisance Species Plans, which are approved for each State by the Aquatic Nuisance Species Task Force.

Contact: Aaron Woldt, aaron_woldt@fws.gov, (612) 713-5110, Michael Hoff, Michael_Hoff@fws.gov, (612) 713-5114, Chuck Traxler, Charles_Traxler@fws.gov – Website contact.

4. COLLABORATIVE ARRANGEMENTS

The Service will implement its GLRI projects in close collaboration with a wide range of partners. Collaboration will range from providing technical assistance to partners; providing the Service's GLRI funds to collaborators through intra- and interagency agreements, e.g., Service agreement with the National Fish and Wildlife Foundation to manage the *Sustain our Great Lakes* Habitat and AOC grant programs, and cooperative agreements to conduct high priority work; participating on project review panels/committees to identify with partners recipients of GLRI grant funds, e.g., *Sustain our Great Lakes* Habitat and AOC grant programs; and apply provisions of State Aquatic Nuisance Species Management Plans under which grants for these activities are issued.

5. FUNDING SUMMARY SPREADSHEET

See attached Funding Summary Spreadsheet

Attachment 1: Summary of Duties of the U.S. Fish and Wildlife Service (Service) Liaison to the U.S. EPA Great Lakes National Program Office (GLNPO); (IA Template 2013-155)

PRIMARY DUTIES

- Assist in identifying actions and targets for removing beneficial use impairments of fish and wildlife species, populations, and habitats in Great Lakes Areas of Concern that will lead to delisting. This will be accomplished by coordinating with Service personnel and partners to provide sound technical assistance and advice and to identify resources and opportunities for on the ground restoration actions.
- Support efforts of the Service and GLNPO by assisting in coordinating, planning, and implementing aspects of the Great Lakes Restoration Initiative related to Federal trust fish and wildlife resources and their habitats.
- Provide support to the Service's Great Lakes Coastal Program, including information exchange, advocacy, partnership development, and program development.
- Assist in coordinating Service leadership and implementation of the Great Lakes Water Quality Agreement (see Great Lakes Water Quality Agreement below for more detail) for the Habitat and Invasive Species Annexes.
- Participate in GLNPO staff meetings to facilitate the flow of information between the two agencies.
- Participate in the development of State of the Lakes Ecosystem Conference (SOLEC) indicators so that indicators related to Federal trust fish and wildlife resources and their habitats are considered. This will be accomplished by working with the Service's representative(s) on the SOLEC Steering Committee and participating on SOLEC indicators work groups, as appropriate.

GENERAL DUTIES

Service

- Serve as a Service point of contact for GLNPO regarding Federal trust fish and wildlife matters in the Great Lakes, particularly with the implementation and funding coordination of the GLRI.
- Advocate for the Service's mission and priorities and Federal trust fish and wildlife resources and their habitats, in general, in the Great Lakes.
- Communicate and coordinate with pertinent Service programs in field offices (project leaders and staff) and RO staff and management to identify opportunities for the Service to carry out its mission effectively and efficiently in the Great Lakes, such as through establishment of new partnerships, more efficient ways to approach fish and wildlife restoration, leveraging funding resources, identifying connections among Service programs, identifying opportunities for the Service to engage to address the Service's mission and priorities, etc.
- Share information on Service positions, policies, contacts for specific issues, etc., within the Service and with GLNPO.
- Serve as a point of contact for the Service, as appropriate, among Great Lakes U.S. and Canadian agencies and nongovernmental organizations.
- Serve as a bridge between Great Lakes programs and activities in the Service's Regions 3 (Upper Great Lakes) and 5 (lower Great Lakes and St. Lawrence River), as well as with Headquarters, to ensure Great Lakes issues are addressed holistically across regional boundaries, as appropriate.

- Assist in coordinating the identification and compilation of pertinent Service information for inclusion in various reports and briefing documents, such as the Great Lakes Restoration Initiative Reports to Congress, International Joint Commission reports, SOLEC, Great Lakes Collaboration, and others.
- Identify and pursue opportunities to use and expand on development of products of the Service's National Wetland Inventory in the Great Lakes.
- Coordinate with Region 3 External Affairs and assist in planning and conducting outreach efforts, including those with Congress, as appropriate.
- Seek opportunities and provide support to efforts to connect people to nature, including working with External Affairs.
- Prepare or coordinate, as appropriate, preparation of responses to inquiries and requests for information.

GLNPO

- Share information and educate GLNPO management and staff on pertinent Service efforts.
- Communicate and coordinate with pertinent GLNPO staff with respect to NRDA and Great Lakes Legacy Act project developments.
- Serve as an EPA point of contact for the Service regarding Federal trust fish and wildlife matters in the Great Lakes, particularly with the implementation and funding coordination of the GLRI.

Other agencies and organizations

Great Lakes Executive Committee

- Support the GLEC through leadership of the Great Lakes Water Quality Agreement Habitat and Invasive Species Annexes
- Provide updates on appropriate issues associated with Federal trust fish and wildlife resources and their habitats are considered.

Great Lakes Water Quality Agreement

- Help coordinate the Service's leadership role in implementation of the Habitat and Invasive Species Annexes
- Participate in Lakewide Management Plans and associated working groups, as appropriate.

Great Lakes Commission

- Provide support to the Service's point of contact to the Great Lakes Commission and interact with Commission staff to plan and implement projects related to Federal trust fish and wildlife resources and their habitats.

Sustain Our Great Lakes Program

- Serve as project officer of the grant between the U.S. Fish and Wildlife Service and the National Fish and Wildlife Foundation for implementation of the GLRI portion of the Sustain Our Great Lakes grant program.

Midwest Natural Resources Group

- Provide support to the Service representative to the Midwest Natural Resources Group, including participating on planning committees and the Great Lakes Focus Area Committee, as appropriate, on behalf of Federal trust fish and wildlife resources in the Great Lakes.

United States Environmental Protection Agency (US EPA)
Interagency Agreement 2013 Amendment
with United States Department of the Interior, Bureau of Indian Affairs (BIA)
#DW95822601-1
SCOPE of WORK and BUDGET January 9, 2013

Purpose

Recognizing that the Great Lakes ecosystem is an invaluable resource containing over 20% of the world's surface freshwater and providing drinking water to over 40 million people, the Administration, in 2009, announced the Great Lakes Restoration Initiative (GLRI) to protect, restore and maintain the Great Lakes ecosystem. In conjunction with a number of federally recognized tribal governments and 15 other Federal Agencies, the USEPA will implement strategic, priority actions to achieve the vision of a restored, protected and sustainable Great Lakes ecosystem.

Tribal governments have sovereign jurisdiction over key ecosystem areas of the Great Lakes basin and already have substantial valuable experience developing and implementing restoration projects located in the Great Lakes basin that are consistent with the GLRI Action Plan. The U.S. Bureau of Indian Affairs (BIA) has an authority under Public Law 93-638 (638) to readily contract federal funding and other resources to tribal governments, administer those contracts and provide technical assistance, as needed, to tribes. The Tribal governments and BIA have substantial experience together and have developed effective working relationships based on BIA support to Tribal governments based on the framework of the 638 authority.

The purpose of this Interagency Agreement (IA) is to provide funding to the BIA to contract to Tribal governments with lands in the Great Lakes basin using BIA's 638 authority to help implement the priorities of the GLRI in a timely fashion. Specifically, this IA will help complete development of the Great Lakes Restoration Initiative Action Plan (Action Plan) and implement priority programs, projects, and activities to protect, restore and maintain the Great Lakes ecosystem through participation of sovereign tribal governments as well as federal, state and local governmental units. This IA will also utilize BIA capabilities through and with the abilities of the tribal governments to implement priorities, programs and projects of the Great Lakes Water Quality Agreement such as the Lakewide Management Plans, the Remedial Action Plans for Areas of Concern, the Binational Toxics Strategy, and the Cooperative Science and Monitoring Initiatives, among others.

The GLRI Action Plan identifies goals, objectives, measurable ecological targets, and specific actions for five focus areas—Toxic Substances and Areas of Concern; Invasive Species; Nearshore Health and Nonpoint Source Pollution; Habitat and Wildlife Protection and Restoration; and, Accountability, Education, Monitoring, Evaluation, Communication and Partnerships. Tribal governments have abilities and goals, objectives and measurable ecological targets consistent with the GLRI Action Plan and the tribal governments wish to participate in the same fashion and in cooperation with other governmental units that are participating in the GLRI Action Plan. Federal agencies, including EPA and BIA, have a Federal Trust Responsibility to the Tribal governments to help them participate in the GLRI.

Focus Areas and Allocations Through Fiscal Year 2014 20132

The project period for this IA extends through the end of September 30, 2014, which is the end of Fiscal Year 2014 (FY14). With allocations through Fiscal Year 2014, and with the funds transferred under this IA, the BIA will undertake actions in the Habitat and Wildlife Protection and Restoration Focus Area. The activities that the BIA will undertake are set forth below. Some on-the-ground work may not be completed until 2014.

Template Title: Great Lakes Tribal Species & Ecosystems Restoration

Template Number: 1

Template Description: The Great Lakes Tribal Species and Ecosystems Restoration Program will consist of grants to between 24 and 30 Great Lakes tribes and inter-tribal organizations each year through FY14 to implement efforts to protect and restore culturally-significant native species and their habitats.

Purpose: To protect and restore culturally-significant native species and their habitats.

Statutory Authority: The Federal Trust Responsibility and authority for it were created in various Treaties between Congress and Tribal Governments, such treaties being considered by the U.S Constitution as part of the Law of the Land, at a higher priority than relationships between and among EPA and the other federal, state and local governmental units. To help empower BIA and other federal agencies as they implement the federal trust responsibility to tribal governments, Congress and the Administration enacted Public Law 93-638 (P.L. 93-638), known as the **Indian Self-Determination and Education Assistance Act of 1975**, as amended, to provide authority to BIA, and other federal agencies, to contract federal funding to sovereign tribal governments for their use in determining for themselves how to provide government services and homelands for their members. Such federal GLRI funding contracted through the BIA's P.L 93-638 authority to be used by tribes in pursuit of goals and objectives of the GLRI Action Plan that are consistent with tribal plans, goals and objectives.

Description of Work:

Task 1: PL 93-638 Contracts with Great Lakes Tribes

Indian country (reservation land base where tribal governments have sovereign jurisdiction and ceded territories where tribes retain rights) represents a significant portion of the Great Lakes Basin, especially for the Lakes Superior and Michigan watersheds. Native species and threatened and endangered species are fundamental components of tribal cultural definitions. More specifically, parts of Indian country are held in trust by the United States for the beneficial use of the tribal governments. As trustee, the Federal Government and its agencies, including EPA and BIA, implement the federal trust responsibility to tribes by providing resources and technical assistance to manage, protect and restore key ecological resources needed by tribes to provide homelands with key resources to their members.

Tribes rely on key ecological resources for subsistence, religious expression and meaning. Tribal environmental/natural resource programs work with increasing administrative sophistication. Great Lakes tribes are national leaders in wild rice restoration and enhancement techniques. Tribes were significant contributors to the GLRC Strategy, and are essential partners in implementing projects to achieve the habitat restoration goals of that strategy.

Midwestern tribes have jurisdiction over millions of acres of forest, lake, wetlands and stream-miles. Great Lakes Tribes have created national models for wetlands/waterfowl restoration efforts that stress partnership between tribes, as well as with states, federal agencies and private landowners.

Primary Focus Area: Habitat and Wildlife Protection and Restoration

This program will build upon the contractual history and administrative tools used by BIA to work with tribal governments. It will fund on-the-ground ecological restoration and enhancement efforts within three categories. Overlap may occur.

1. Ecologically and culturally significant species restoration
 - a. Wetlands
 - b. Waterfowl
 - c. Fish
 - d. Manoomin (wild rice)
 - e. Terrestrial Species
2. Invasive Species Control to support ecological restoration efforts
 - a. Aquatic
 - b. Terrestrial
3. Ecosystem Adaptation to Climate Change Impacts

Program/Project Location

Projects will occur at more than 24 Tribal governments and tribal organizations throughout the Great Lakes basin.

Strategic Planning Linkages

The primary intent of this work is to contribute to the achievement of the goals, objectives and measures of the Great Lakes Restoration Action Plan. Specifically, the following goals, objectives and measures are taken from the Habitat and Invasive Species Focus Areas of the plan. They represent the ultimate purpose behind funding of this GLRI Interagency Agreement, and the tribal projects will contribute to their achievement.

HABITAT

Applicable Long Term Habitat Goals

Goal 1: Protection and restoration of Great Lakes aquatic and terrestrial habitats, including physical, chemical, and biological processes and ecosystem functions, maintain or improve the conditions of native fish and wildlife.

Goal 2: Critical management activities (such as stocking native fish and other aquatic species, restoring access of migratory fish species at fish passage barriers, and identifying and addressing diseases) protect and conserve important fish and wildlife populations.

Goal 4: High priority actions identified in strategic plans (such as state and federal species management, restoration and recovery plans, Lakewide Management Plans, Remedial Action Plans, and others) are implemented, lead to the achievement of plan goals, and reduce the loss of fish and wildlife and their habitats.

Applicable Interim Habitat Objectives

By 2014, 4,500 miles of Great Lakes rivers and tributaries will be reopened and 450 barriers to fish passage will be removed or bypassed.

By 2014, 82% of recovery actions for federally listed priority species will be implemented.

By 2014, 53 percent of populations of native aquatic non-threatened and endangered species are self sustaining.

By 2014, 97,500 acres of wetlands, wetland-associated uplands, and high priority coastal, upland, urban, and island habitats will be protected, restored or enhanced.

Applicable Estimated Habitat Measures of Progress from GLRI Action Plan
1. 500 Miles of rivers reopened for fish passage.
2. 10 Number of fish passage barriers removed or bypassed.
3. 5,000 acres of wetlands and wetland-associated uplands protected, restored and enhanced.
4. 1,000 acres of coastal, upland, and island habitats protected, restored and enhanced.

In addition to the contribution this program will make to achieving the specific measures and objectives in the Great Lakes Action Plan articulated above, this program will help meet the goals of the Great lakes Regional Collaboration as well as LAMP and Area of Concern goals (where applicable). All work will be completed within one year of receipt of funding.

Estimated Output Measures

- 5,000 acres of wetlands protected, restored, enhanced
- 1,000 acres of wild rice beds protected, restored, re-seeded, enhanced
- 500 Stream miles re-connected, restored for fish habitat
- 500 acres of wetland/upland managed for invasive species control
- 100 Nesting structures
- 5 spawning areas
- 24 Management strategies created / implemented to adapt ecosystem protection to regional climate change impacts
- Other habitat and invasive species projects not already mentioned will have measurable results, as applicable.

Task 2: Participation of BIA in Broader Great Lakes Efforts

This IA will also provide BIA with the capabilities needed to increase its contributions to the implementation of GLRI priorities, programs and projects, as well as programs of the Great Lakes Water Quality Agreement such as the Lakewide Management Plans, the Remedial Action Plans for Areas of Concern, the Binational Toxics Strategy, and the Cooperative Science and Monitoring Initiatives, among others.

BIA will also continue to participate as a member in the Regional Working Group of the Great Lakes Inter-Agency Task Force.

BIA will also coordinate with its Eastern Region to include the New York tribes in the Great Lakes Restoration initiative by requesting project proposals in 2013 and setting aside funds to address tribal habitat restoration needs in Lake Ontario.

Task 3: Program Coordination and Quality Assurance Management

Staffing History at BIA

Existing BIA program staff in natural resources and environmental protection have been previously reduced in capacity to bare bone status. Using P.L. 93-638, The Indian Self-Determination and Educational Assistance Act of 1975 (aka 638), Congress and the Administration have shifted BIA budgets to tribal governments to the greatest degree possible for the larger goal of development of tribal capacity for self-determination. The residual BIA funding and staff that were not shifted to help satisfy tribal self-determination goals is there to conduct only those BIA services for tribes that are inherently federal in existing BIA mission. As the result, there is no excess staff capacity at BIA to absorb and conduct the duties visualized by EPA and Congress for BIA to assist the tribes in participation in the GLRI goals, objectives and outputs.

Existing BIA staff is well versed in BIA's established 638 contracting and administration procedures to efficiently move BIA resources to tribes for existing BIA programs. But there is currently inadequate BIA staff for new program missions, so additional staff is needed at BIA for the duration of the GLRI.

BIA Staff Needs for GLRI Work Plan:

GLRI Program Manager: This IA as amended for 2013 provides \$116,254 for 12 months, during fiscal years 2013-2014 for anticipated personnel, fringe, and travel costs, beginning at the point when the Office is able to hire for the position. Program coordinator duties include:

1. Participation in GLRI Planning and Budgeting activities with the Great Lakes Interagency Task Force, including preparation of the Interagency Funding Guide;
2. Participate in Interagency Task Force and Regional Working Group communications efforts, including coordination with other federal agencies on related GLRI work with tribes;
3. Participate in Great Lakes Water Quality Agreement (GLWQA) and Great Lakes Restoration Initiative (GLRI) Programs and Processes;
4. Seek quality tribal proposals for approximately 24-30 Great Lakes tribal governments or inter-tribal organizations for
 - i. Great Lakes Tribal Species & Ecosystem Restoration, as described above.
5. Help prioritize & select tribal proposals for GLRI funding using criteria in the Special Conditions Section of the IA.
6. Monitor compliance with the IA and help plan subsequent IA SOW & budget amounts;
7. Monitor and coordinate 24-30 tribal P.L. 93-638 contracts, including scopes of work, product outcomes and funding status;
8. Coordinate funding obligation, expenditures and de-obligation using proper BIA financial management of GLRI funding and internal GPRA and financial reporting following paragraph 8 of the Special Conditions section of the IA.
9. Prepare and submit reports complying with provisions of the 2010 and subsequent Great Lakes Grant Guidance;
10. Ensure visible project identification signage at each on-the-ground project;
11. Ensure health, safety and environmental compliance for each project;
12. Brief EPA and BIA officials on GLRI objectives and outcomes;
13. Coordinate with BIA Circle of Flight Manager & other funding leveraging program opportunities;
14. Work with EPA to ensure that the funds transferred under this IA are not used to supplant the base programs funding of the BIA, such as the Circle of Flight Program;
15. Participate in the annual BIA Circle of Flight Conference related to GLRI agenda items;
16. Coordinate with GLRI QA managers at EPA, the tribes and BIA to ensure GLRI

- requirements are being satisfied;
17. Reports in the electronic Great Lakes Accountability System (GLAS) to report project performance & monitor tribal input to GLAS;
 18. Coordinate within BIA, as needed, with the BIA Midwest Regional Environmental Scientist and other program staff regarding possible GLRI projects in other focus areas such as Toxics and Areas of Special Concern, in the event that tribal governments might approach BIA regarding such projects.

The BIA GLRI Program Manager would also be responsible for BIA's Quality Assurance (QA) duties:

1. Coordinates with tribal quality assurance staff and EPA GLNPO quality assurance staff on matters of quality policy;
2. Develops a Great Lakes Quality Management Plan (QMP) for BIA work on the GLRI and revises as needed;
3. Reviews and comments on tribal Quality Assurance Project Plans (QAPPs) for all projects, work assignments, grants, cooperative agreements, and inter-agency agreements involving data acquisition, data generation, and/or measurement activities that are funded by EPA GLNPO.
4. Reviews all tribally submitted QAPPs and approve adequate tribal QAPPs for implementation in all applicable projects, work assignments, grants, cooperative agreements, and inter-agency agreements.
5. Coordinates the correction of deficient QAPPs with tribal quality assurance staff and EPA GLNPO Project Officer(PO) and their management, and assures through appropriate procedures (e.g., contract, financial assistance) that no tribal environmental data collection operations commence before a QAPP is approved
6. Ensures that audits/reviews of BIA and tribal QA activities are accomplished to assure adherence to approved quality system documentation and to identify deficiencies in tribal and BIA QA/QC systems
7. Implements peer review component of quality system
8. In Partnership with EPA assists BIA and tribal staff scientists and project managers in developing quality system documentation and in providing answers to technical questions by providing training and peer to peer meetings.

Tracking

1. Tracks the status of all BIA and tribal quality system documentation using GLNPO's Great Lakes Accountability System (GLAS) Database to be provided.
2. Populate GLNPO GLAS inventory system for all BIA QA documentation and help tribes report the project status for theirs.

Scope of Work and Reporting

1. Develops a QA Scope of Work for the cooperative agreement and provide semi-annual Reports for BIA's outcomes and helps ensure tribes report theirs.
2. Tracks and reports BIA's out comes and helps ensure tribes report theirs into the GLRI accountability system.

Training

BIA's GLRI Program Manager shall have EPA approved training in QA/QC management methods. Building upon EPA training in 2010, BIA will ensure proper training in 2013 for the

new hire.

Coordination

The BIA GLRI Program Manager shall participate in EPA's monthly QA calls or otherwise arrange to obtain the key information from the calls from the US EPA GLNPO QA Manager. Tribal staff involved in QA management will also be provided key information in an effective and efficient means.

Task 4: Reporting to USEPA and to Great Lakes Accountability System

Reporting will be undertaken as described in the Terms and Conditions of this Interagency Agreement.

Points of Contact: Mary Manydeeds
Bureau of Indian Affairs
(612) 725-4539
mary.manydeeds@bia.gov

Milestones/Schedule, including deliverables

Advertise RFP to Tribes	January of each fiscal year to FY 2014
Project(s) selection	February – March of each fiscal year to FY 2014
Project implementation and evaluation	Ongoing, of each fiscal year through FY 2014
Reports to EPA and Accountability System (per terms and conditions of IA)	

Budget for 2013

APPROVED BUDGET for 2013 GLRI Funds	
Budget Categories	EPA Itemization of This Action
a. Personnel	\$75,000
b. Fringe Benefits	\$35,000
c. Travel	\$6,254
d. Equipment	\$0
e. Supplies	\$0
f. Procurement/Assistance	\$3,868,823
g. Construction	\$0
h. Other (e.g., M&S expense)	\$0
i. Total Direct Charges	\$3,985,077
j. Indirect Costs (Whether or not indirect costs are charged, please complete F6)	\$0
k. Total	\$3,985,077

Budget Narrative:

Total IA budget for 2013 work = \$3,985,077

Personnel and fringe represent a new BIA position, as described above, beginning in FY 2013 and through 2014.

Travel consists of the new position working directly with the 24+ tribes in Great Lakes Indian country, providing hands-on assistance, where needed, in reservation offices and at tribal workshops on quality assurance and reporting. Travel may also include trips to EPA office in Chicago for in-person coordination with the federal Great Lakes Regional Working Group, and to New York to work with the Eastern Region Tribes.

Procurement represents:

BIA contracts with up to 24 tribal and inter-tribal organizations for habitat restoration activities.

Title: Asian Carp Framework Projects - USFWS (Template No. 2013-671)

Funding: \$3,580,000

Authority: Nonindigenous Aquatic Nuisance Prevention and Control Act, as amended

Work: The Service and partners will implement the *2013 Asian Carp*

Control Strategy Framework

(<http://asiancarp.us/documents/2013Framework.pdf>)

Framework Section	Project Title	Project Description	Amount
2.1.2	USFWS Monitoring and Rapid Response Team Support in CAWS	Development and support of ACRCC's MRRP, support of Incident Command System (ICS) as needed, provision of staff, equipment, supplies, and ICS team members as needed, attainment of goals and objectives of the MRRP.	520,000
2.1.3	Support for Asian Carp Rapid Response in the Great Lakes Basin	Satisfaction of needs of USFWS partners in addressing rapid response actions around the Great Lakes basin.	700,000
2.1.4	USFWS Great Lakes Asian Carp Monitoring Program	Ongoing early detection, rapid assessment, risk assessment, rapid response program for the Great Lakes, information that will build upon existing knowledge of spawning/recruitment requirements for bighead and silver carp.	350,000
2.6.2	USFWS Fisheries Program Capacity for eDNA sampling and early detection	USFWS conservation offices conducting eDNA sampling in areas of concern, with emphasis on southern Lake Michigan, western Lake Erie, and other potential invasion hotspots.	650,000
2.6.4	USFWS Fisheries Program Capacity for eDNA processing.	USFWS assumes lead in eDNA sample analysis for the CAWS, and processes 120 samples per week at La Crosse Fish Health Center.	500,000
2.6.7	eDNA Educational Video	Final eDNA video released Summer of 2013	10,000
2.7.2	Increased Lacey Act Enforcement of Illegal Transport of Injurious Wildlife	Specifics are considered law enforcement sensitive.	400,000
2.7.4	Increased Web Outreach	AsianCarp.us will continue to be the ACRCC's central platform for public outreach and education reaching over 2,000 people a month from over 80 countries. In FY 2013 the Service will continue in its role as site administrator and seek to expand the website's use of multimedia, particularly video.	50,000

2.8.1	USEPA Support for Asian Carp Activities	Funding will be used for contractor support and emergent technology development, including an eDNA inhibitor study and facilitation of regulatory processes for the registration of a microparticle/micromatrix toxicant.	400,000
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Milestones:

See Action Items, above

Great Lakes Action Plan Measure of Progress: This template directly maps to GLRI Action Plan Invasive Species Focus Area performance metrics for: number of multi-agency plans established..., and number of acres managed for population of invasive species. The Asian Carp Framework Actions, coordinated and implemented with partners, directly responds to the Action Plan Principal Actions to: *Address water pathways vectors, Prevent through Outreach and Education, Develop innovative control technology, Support States' Role in Prevention and Control, Control Key invasive species, and Establish early detection and rapid response capability.* Projects will facilitate progress toward the 2014 Goal 4 objective to develop and implement a “comprehensive program for detection and tracking newly identified invasive species in the Great Lakes is developed and provides up-to-date critical information needed by decision makers for evaluating potential rapid response actions.”

Actions directly support long-term invasive species Goal 5 identified in the Action Plan: “An effective, efficient and environmentally sound program of integrated pest management for invasive species is developed and implemented, including program functions of containment, eradication, control and mitigation.”

Enhanced monitoring under this template will contribute information to assess the metric: “Number of nonnative species newly detected in the Great Lakes ecosystem.”

The program addresses one of nine priorities of the Council of Great Lakes Governors. The program also supports State and Interstate Management Aquatic Nuisance Species Plans, which are approved for each State by the Aquatic Nuisance Species Task Force.

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